

**RELIANCE
METAL WINDOWS**

**WILLIAMS & WILLIAMS LTD.
CHESTER**

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*THE PURPOSE OF THIS BOOK
WILL HAVE BEEN ACHIEVED IF,
THROUGH ITS CIRCULATION, WE
MAKE NEW FRIENDS AND GIVE A
CONVENIENT REFERENCE TO OUR
OLD FRIENDS FOR WHOM "METAL
WINDOWS" AND "RELIANCE
WINDOWS" ARE SYNONYMOUS
TERMS.*

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RELIANCE WINDOWS

After a full study of Architectural and Building requirements, we have succeeded in producing ranges of economical Standard Windows suitable for most kinds of buildings.

In spite of the wide range of our Standards, we realise that it is not always desirable to use a Standard article. For these non-standard, specially made windows, we would refer you to the "Reliance Purpose made Windows" catalogue.

The Standard windows are fully set out and explained under the following headings:—

STANDARD COTTAGE CASEMENTS

STANDARD FRENCH DOORS

STANDARD RELIANCE CASEMENTS

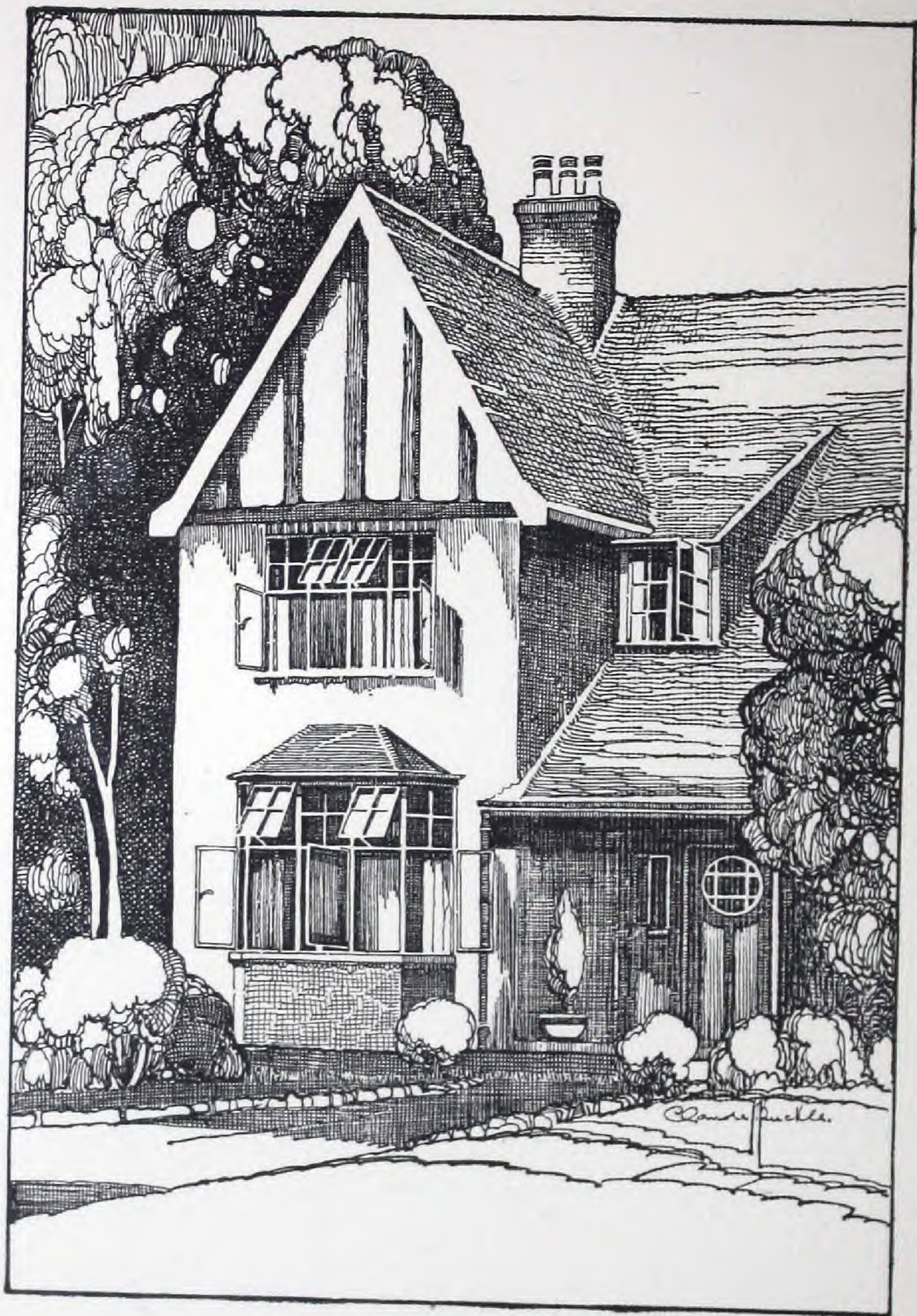
STANDARD SASHES

STANDARD SCHOOL, OFFICE
AND HOSPITAL WINDOWS

STANDARD TROPICAL WINDOWS



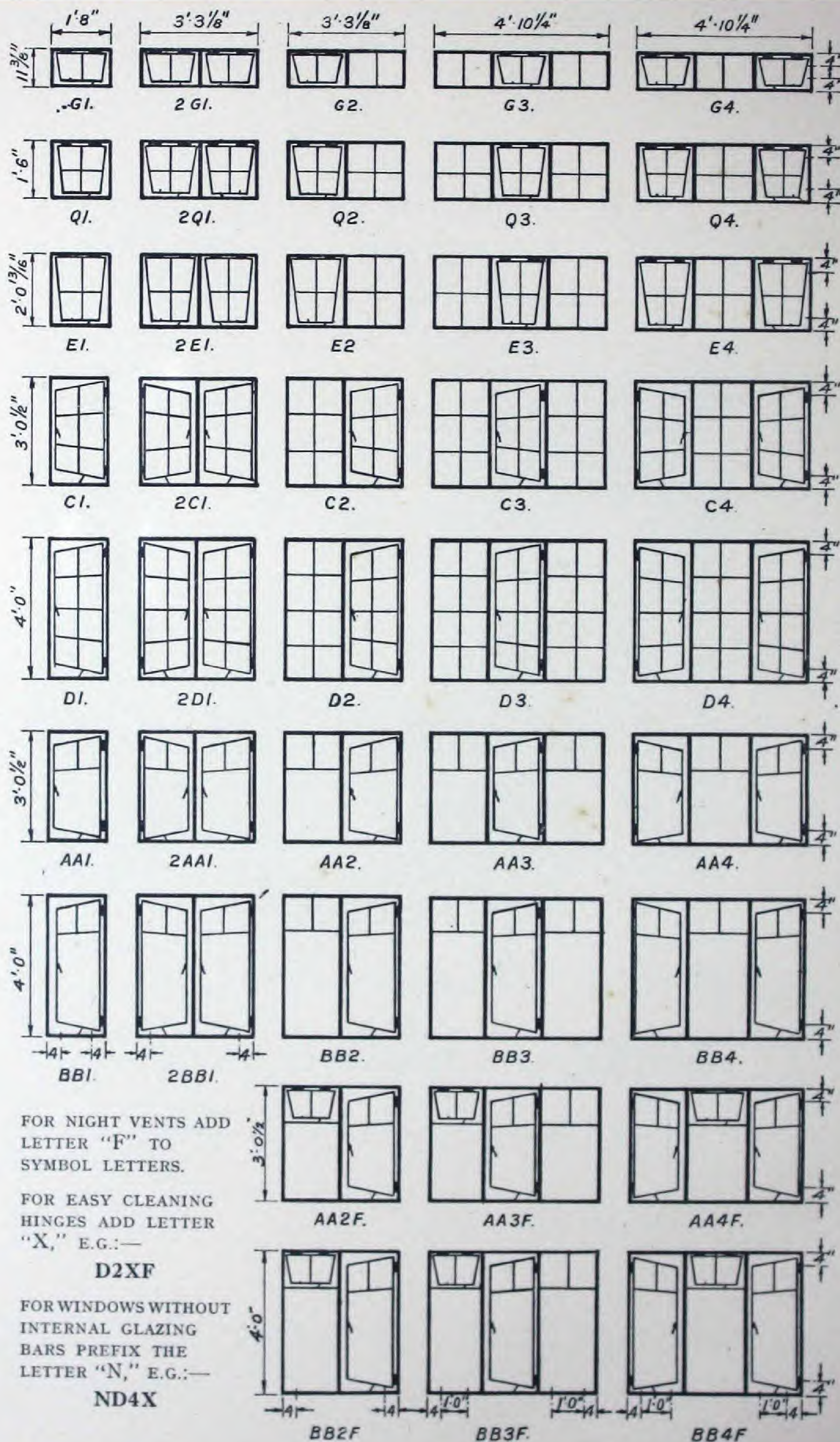
STANDARD
COTTAGE
CASEMENTS



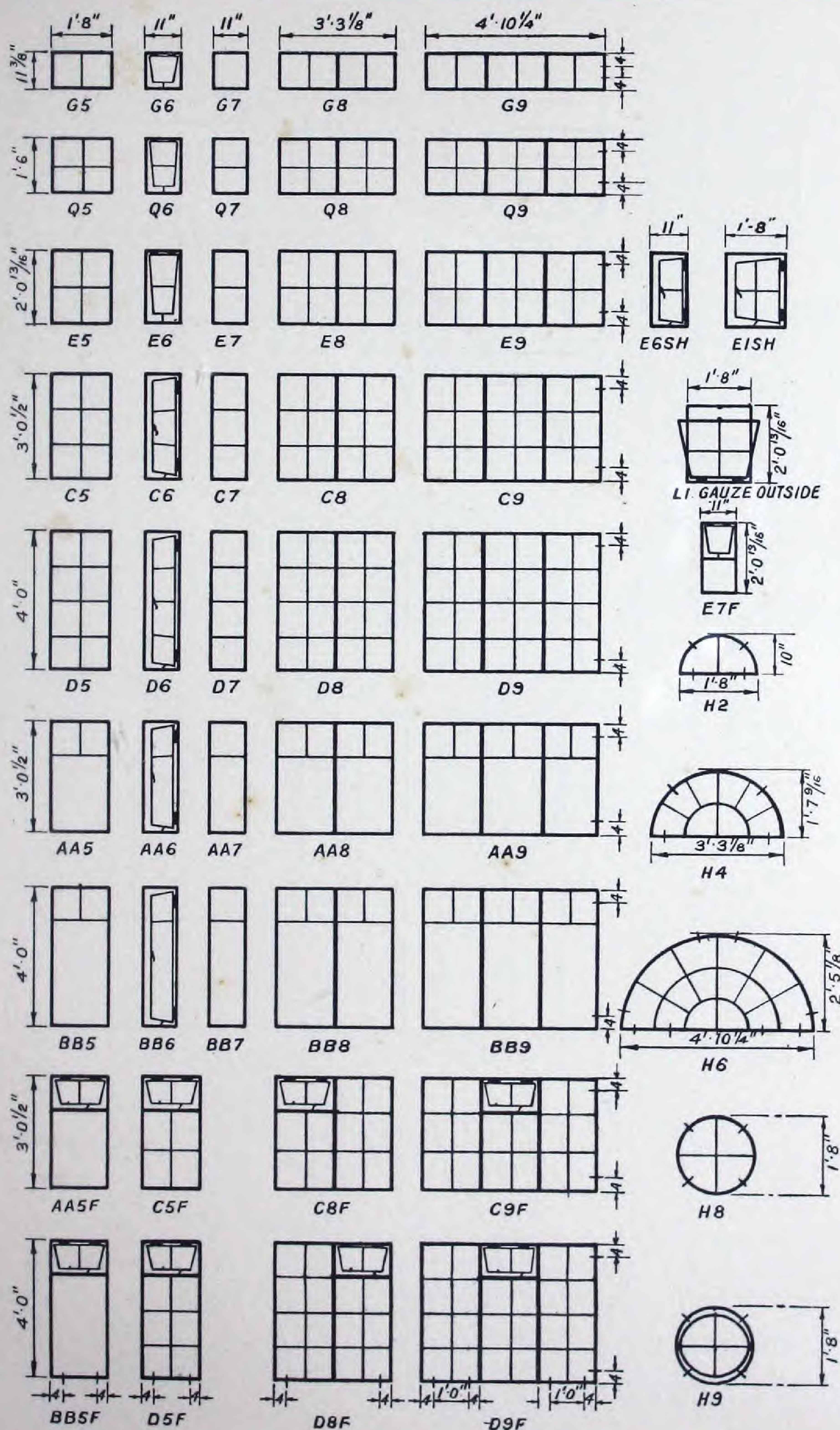
THE following section of
our catalogue deals with
STANDARD COTTAGE
CASEMENTS
(100 series).

In this series we present a
carefully made substantial
window suitable for a wide
range of building require-
ments. These windows are
adaptable to bricks, concrete,
stone, steel or wood con-
struction.

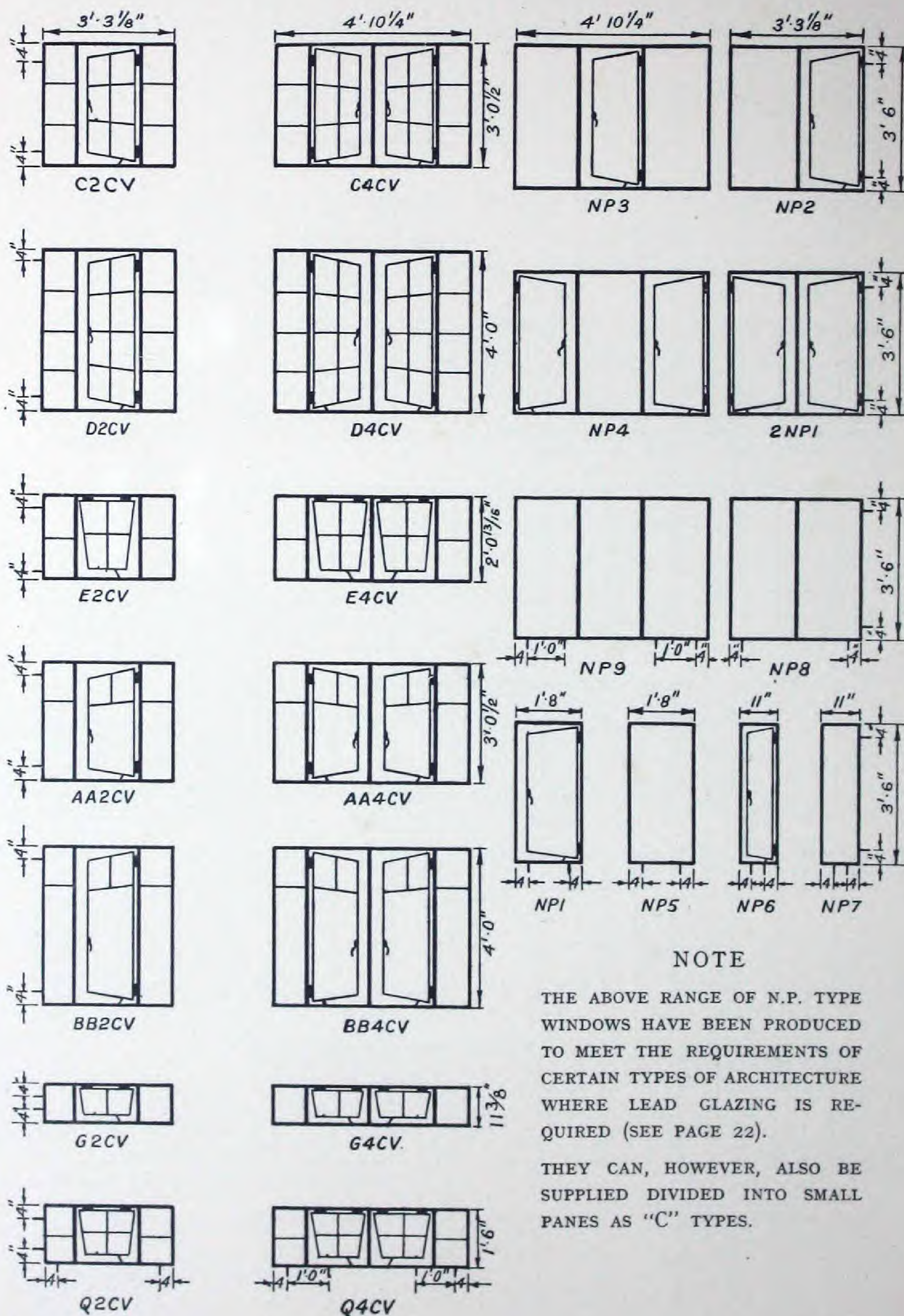
STANDARD COTTAGE CASEMENTS



TYPES AND SIZES



TYPES AND SIZES



NOTE

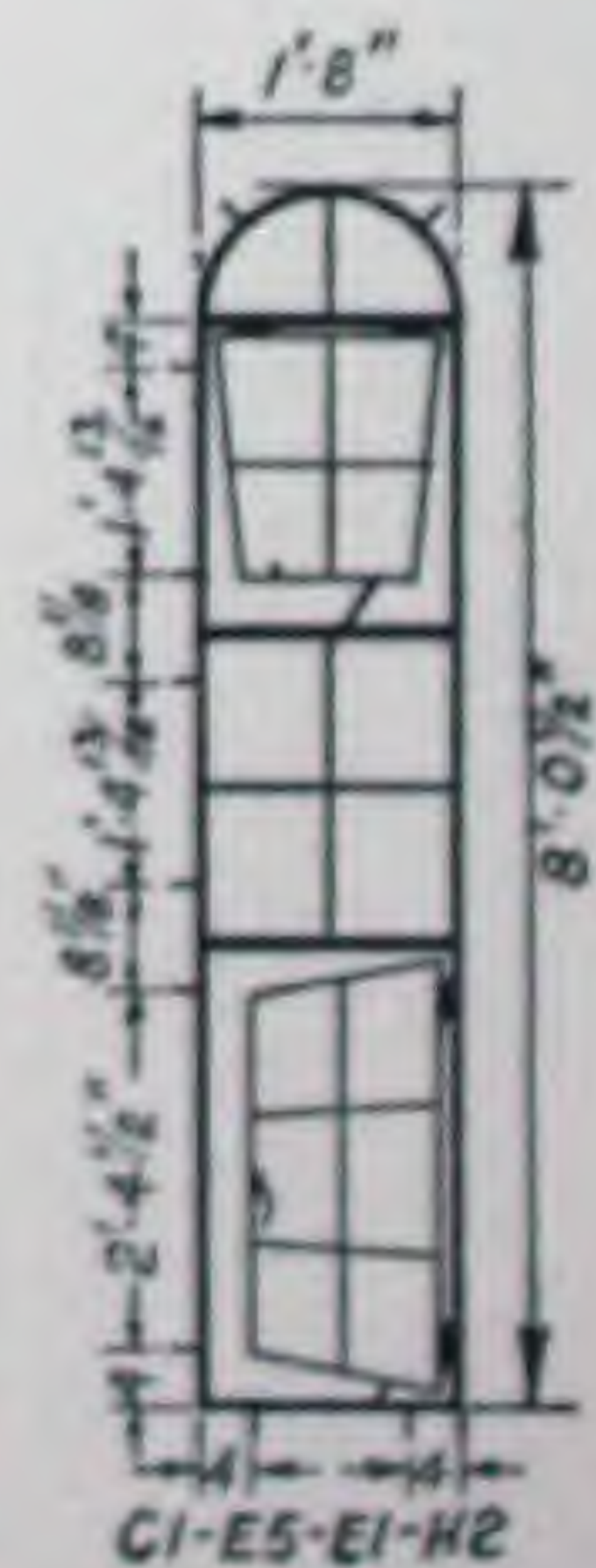
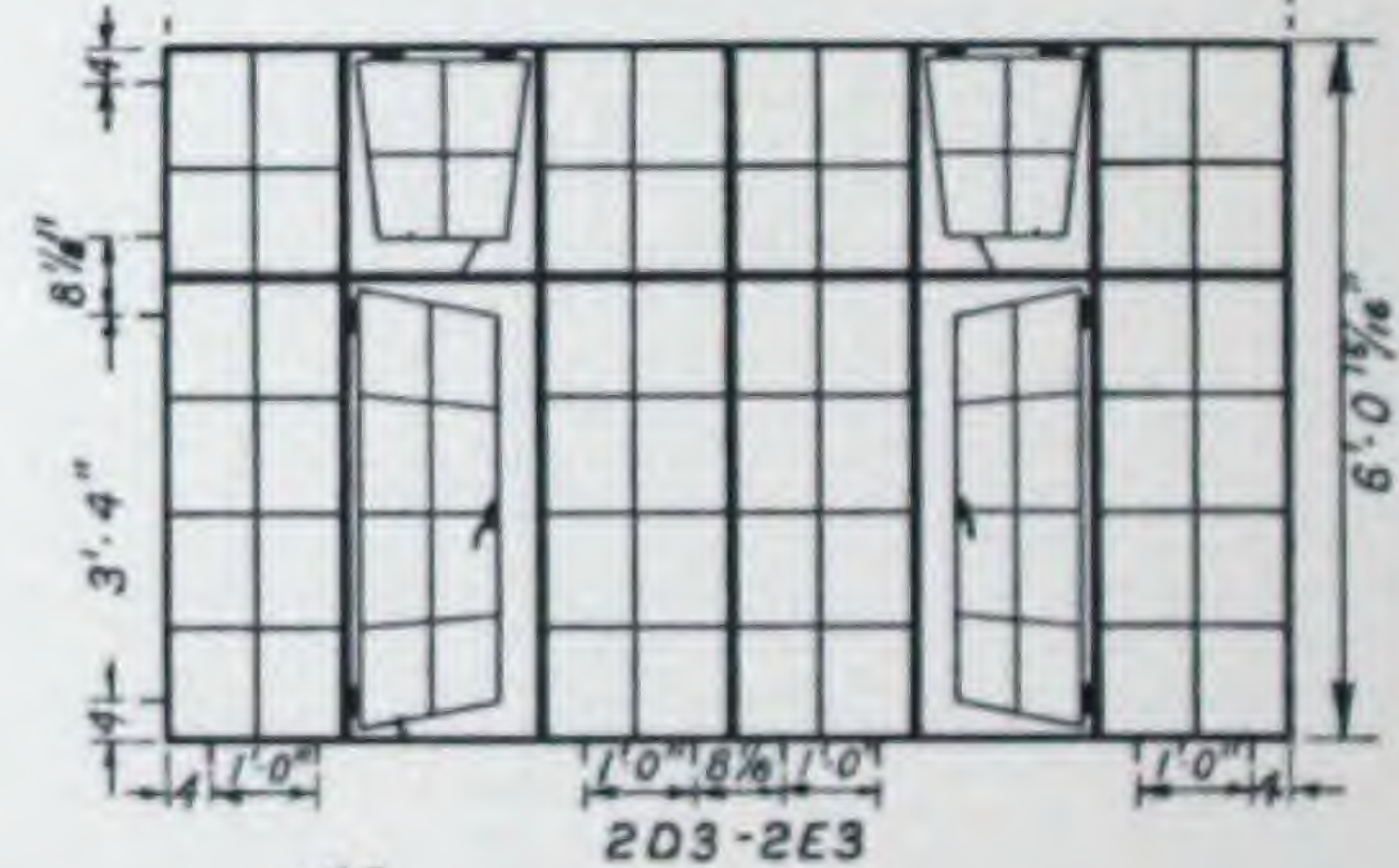
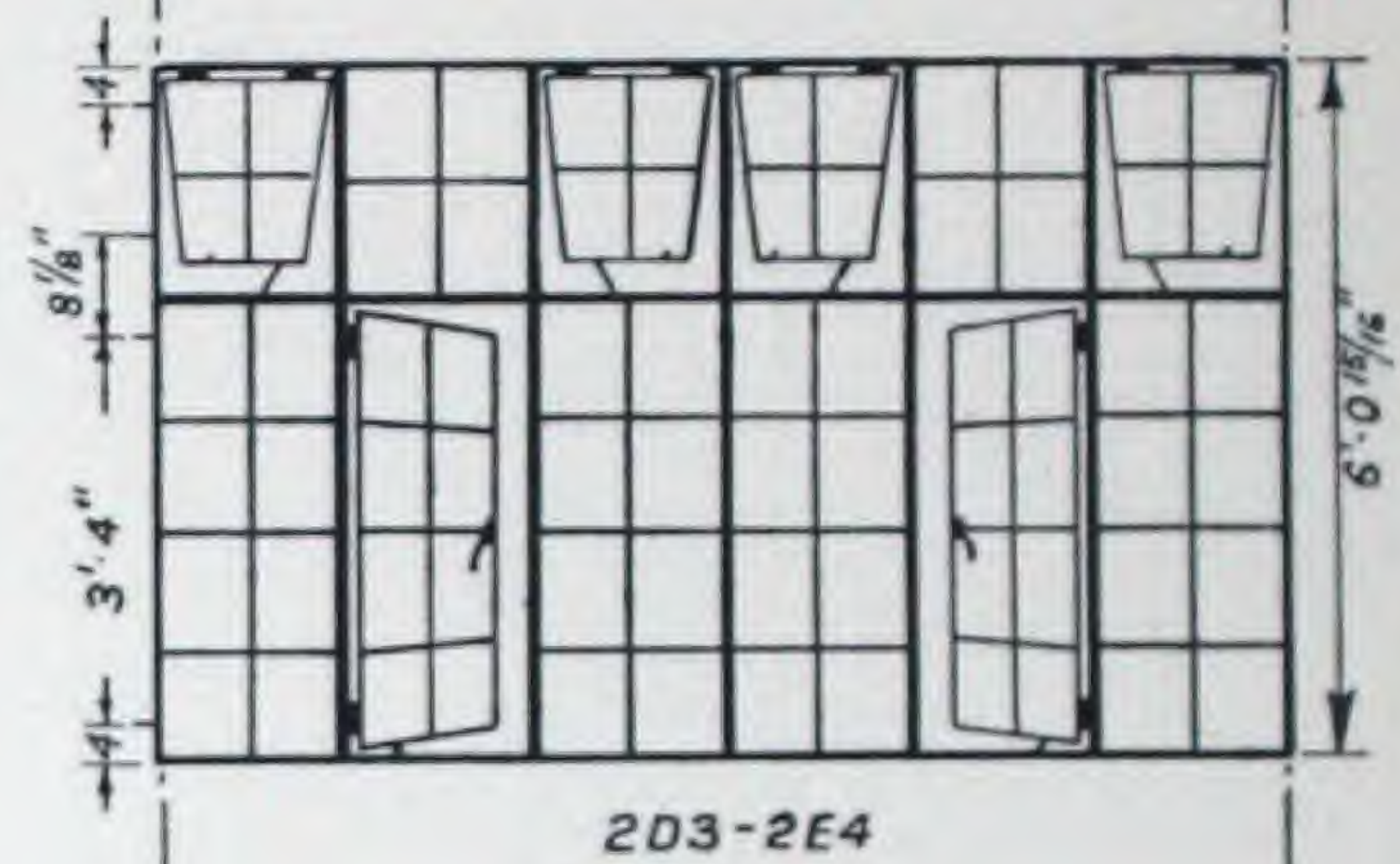
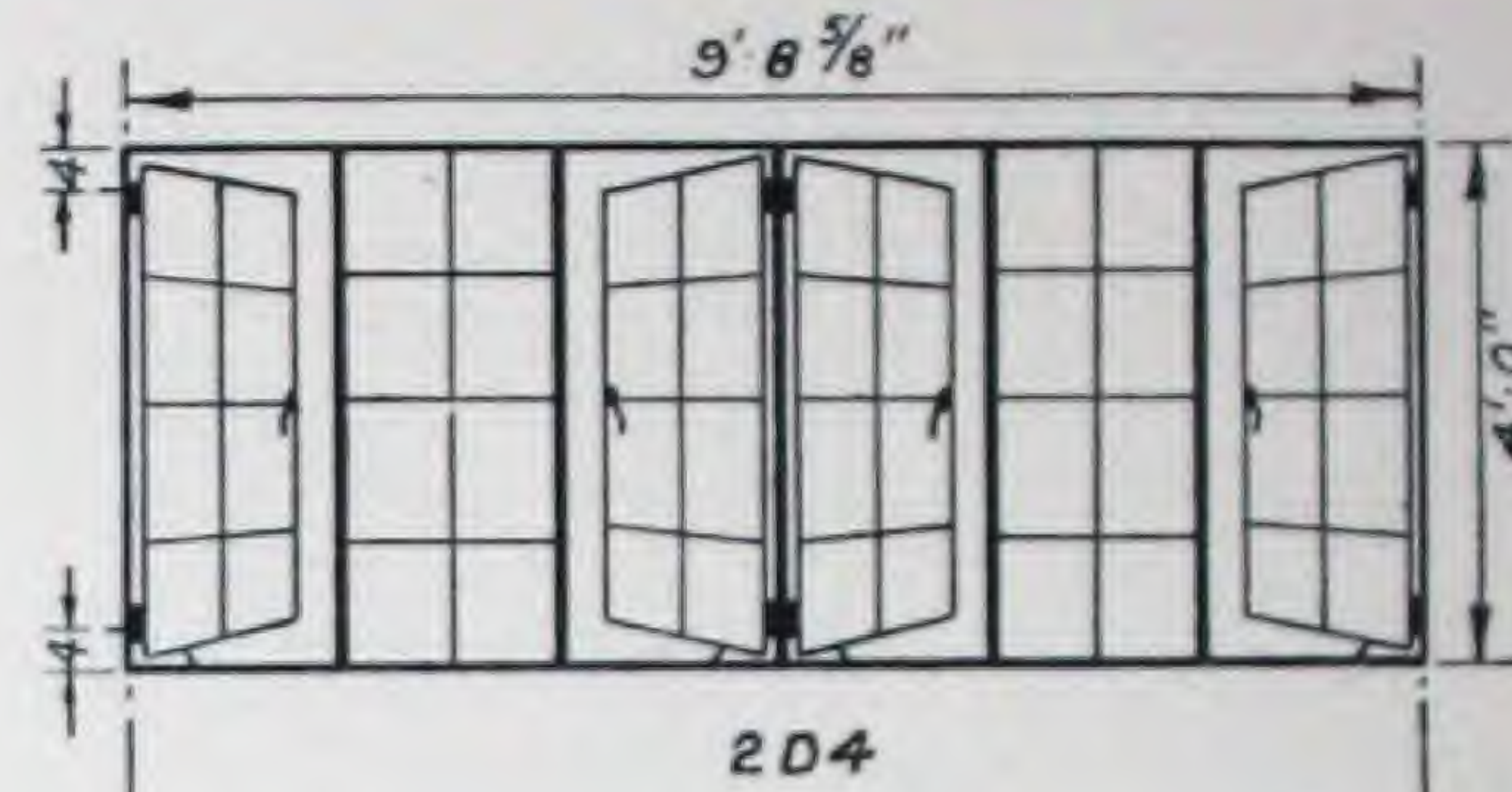
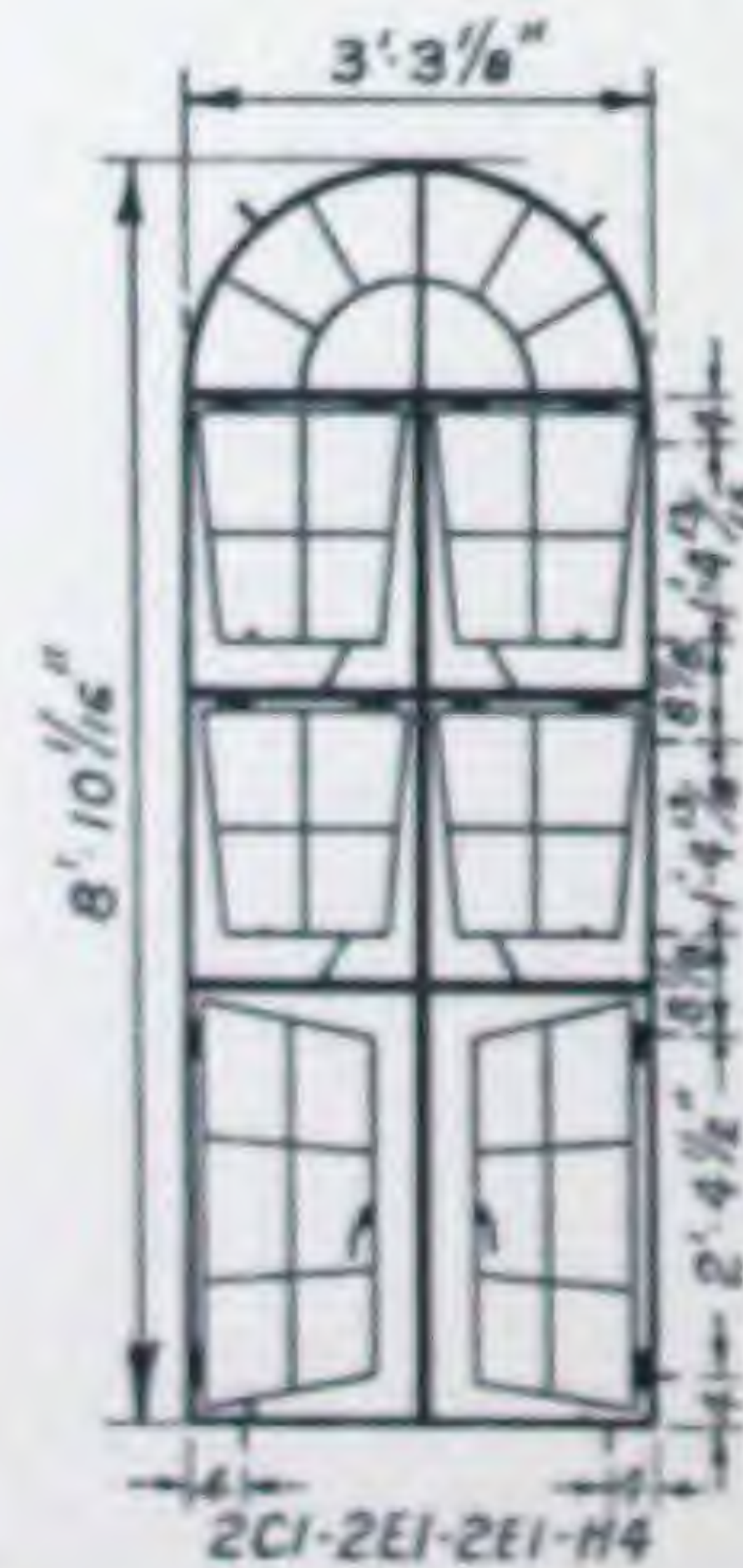
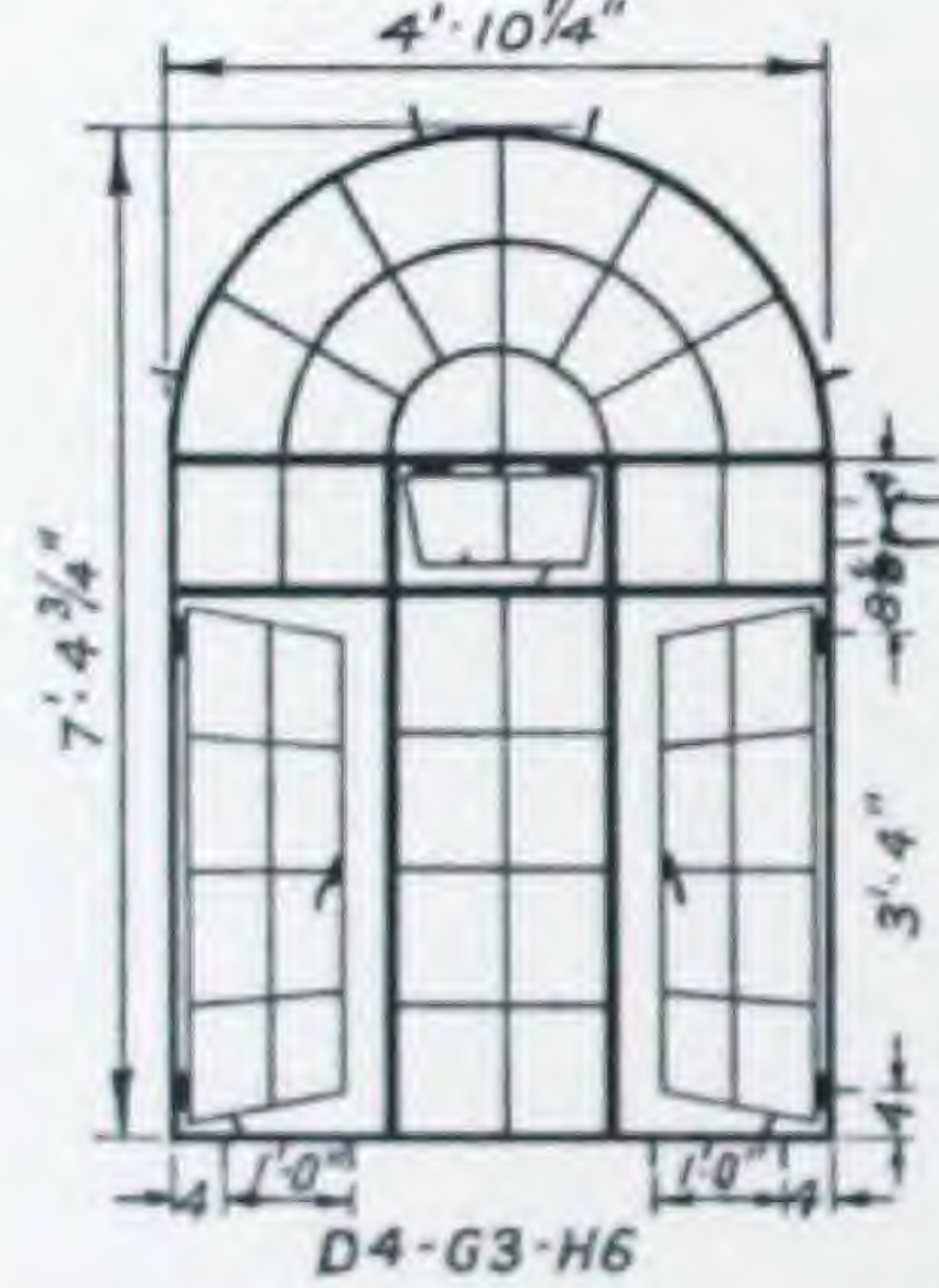
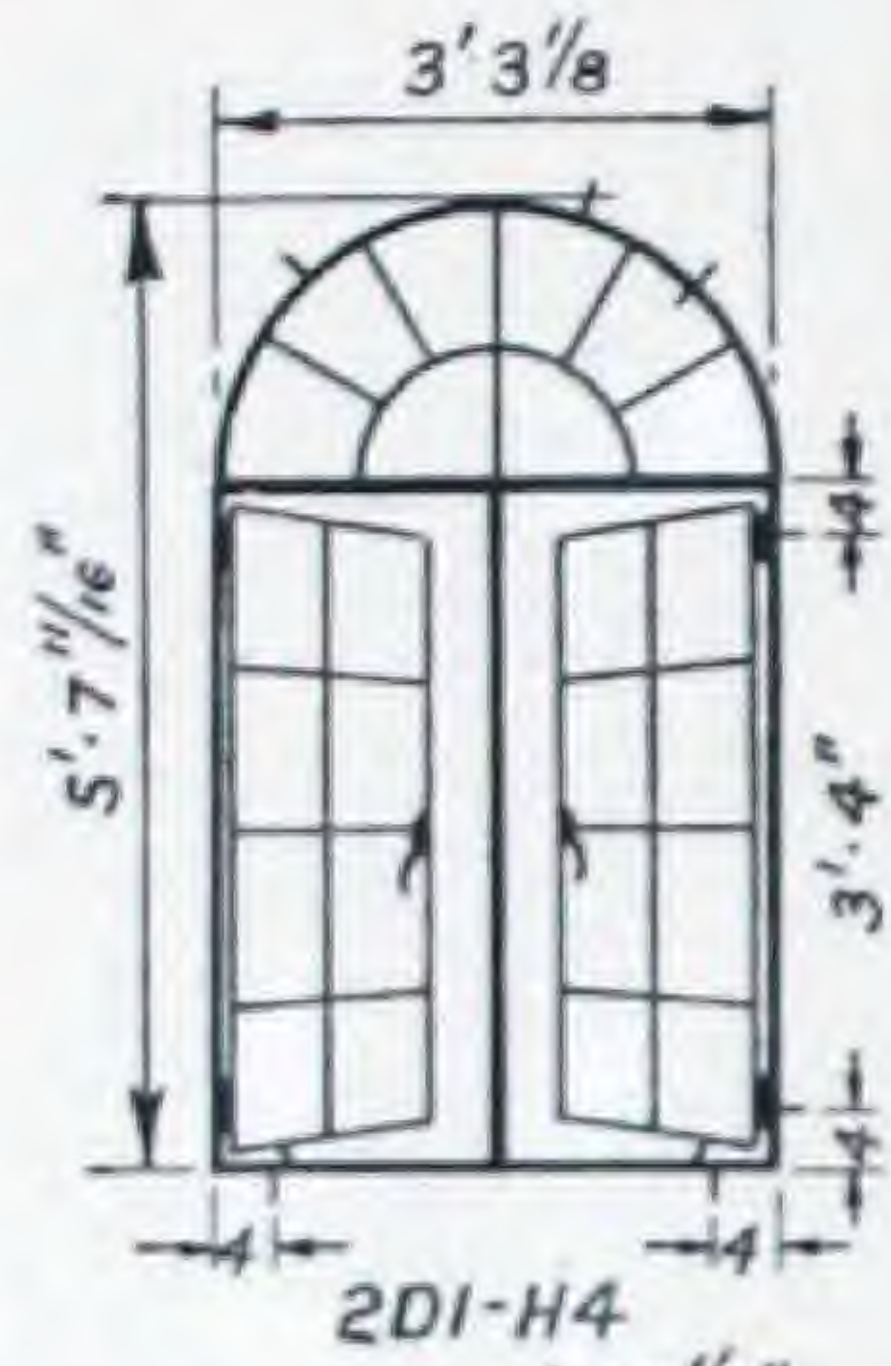
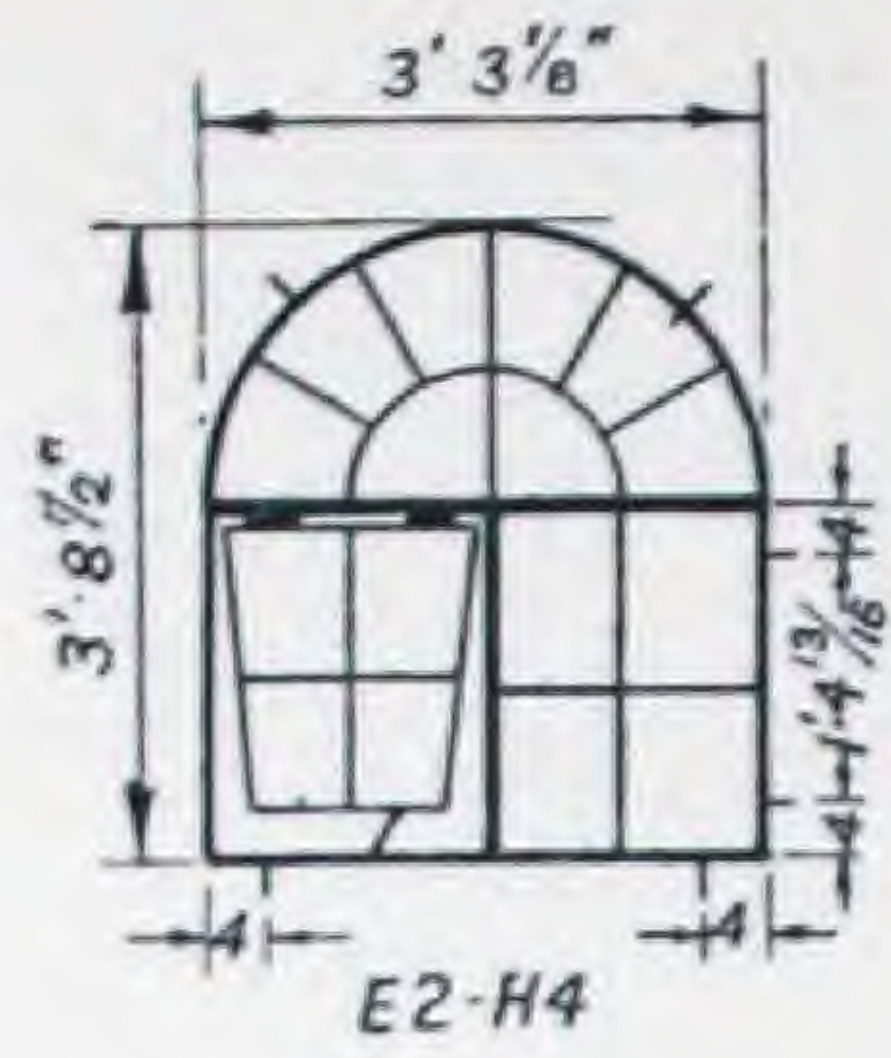
THE ABOVE RANGE OF N.P. TYPE WINDOWS HAVE BEEN PRODUCED TO MEET THE REQUIREMENTS OF CERTAIN TYPES OF ARCHITECTURE WHERE LEAD GLAZING IS REQUIRED (SEE PAGE 22).

THEY CAN, HOWEVER, ALSO BE SUPPLIED DIVIDED INTO SMALL PANES AS "C" TYPES.

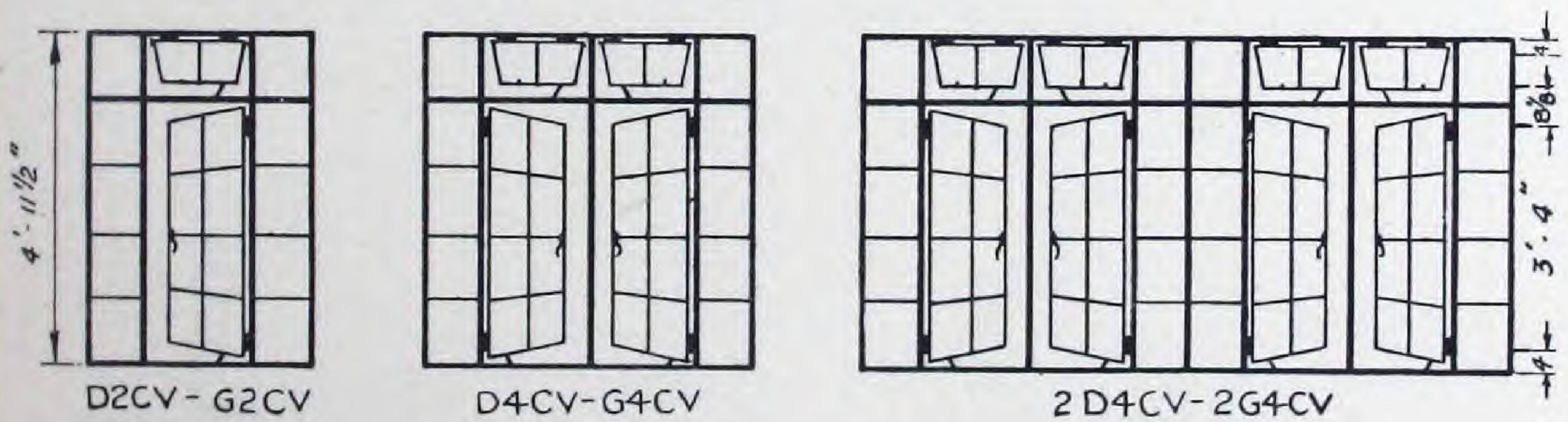
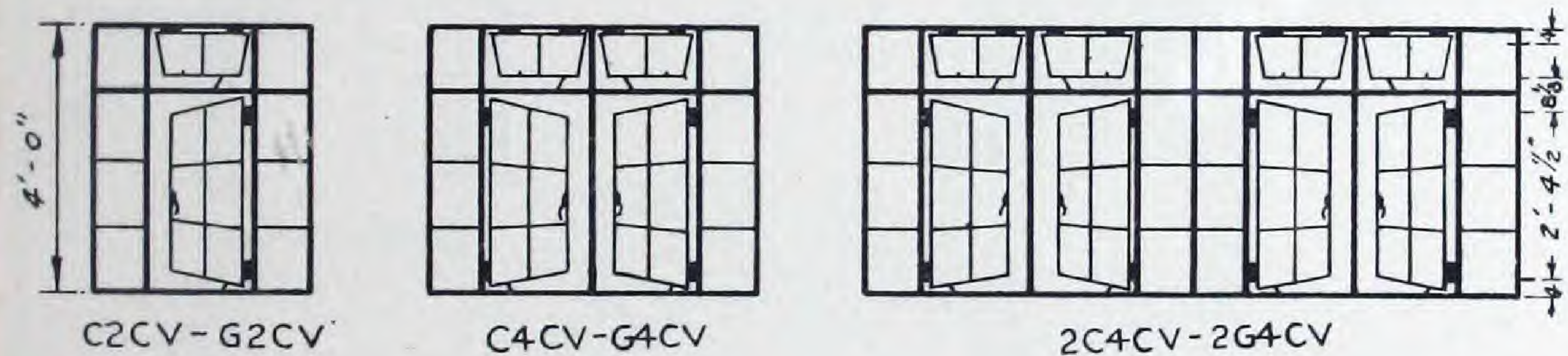
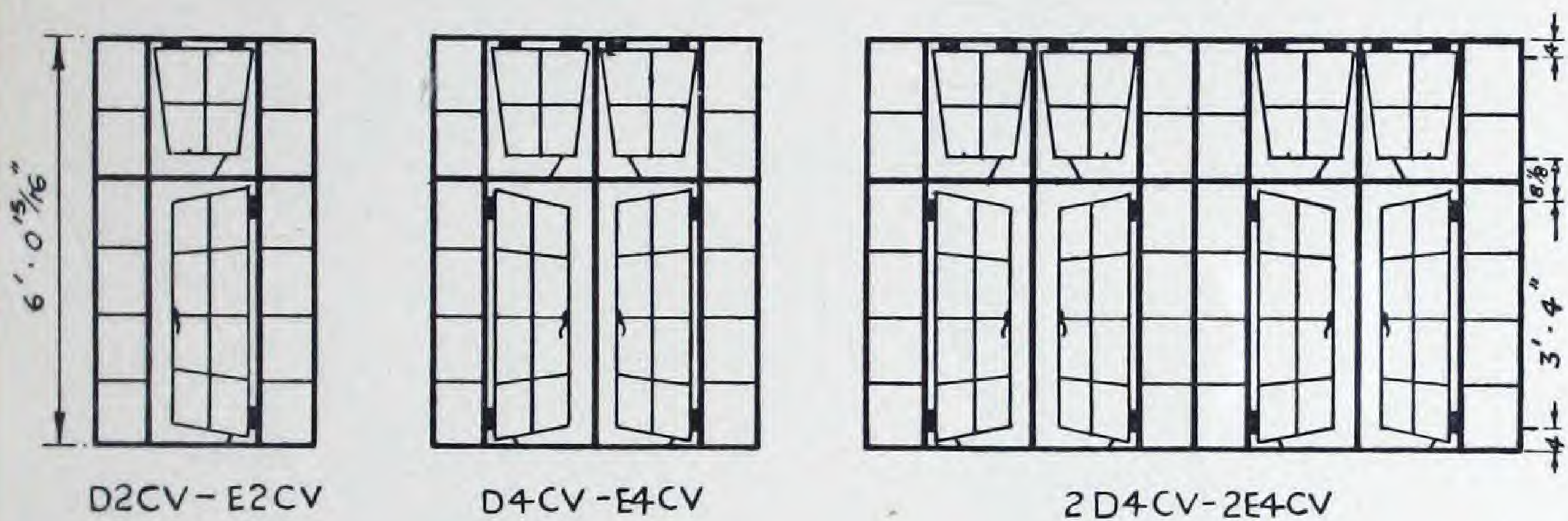
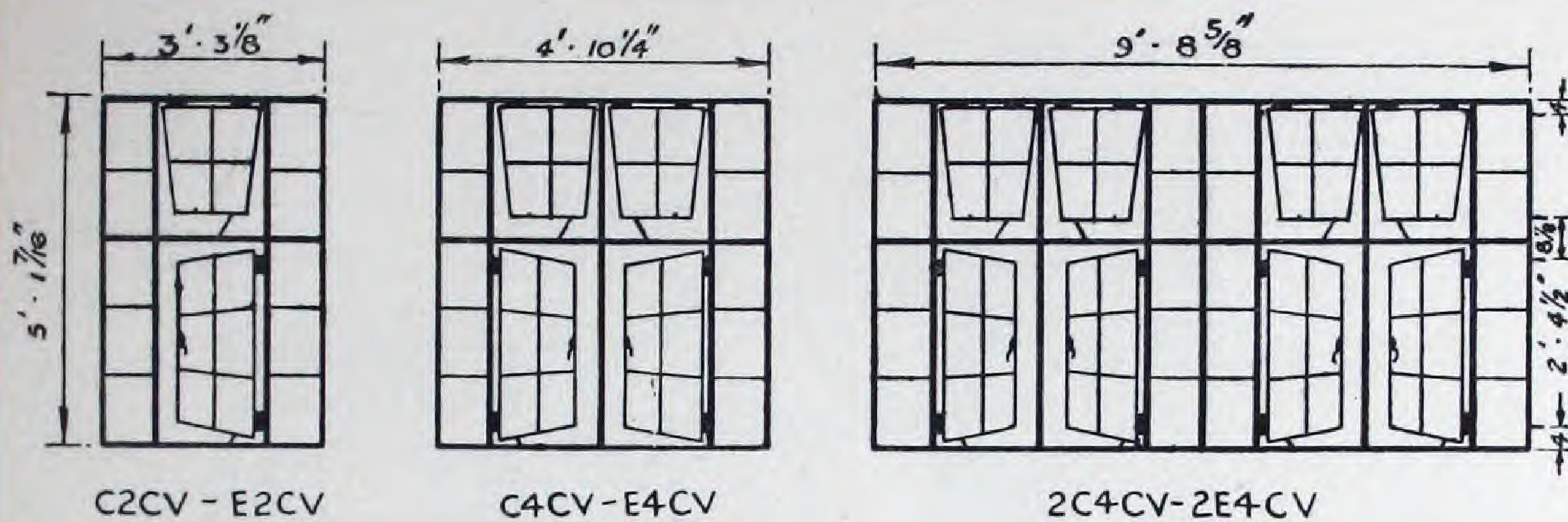
COUPLED TYPES



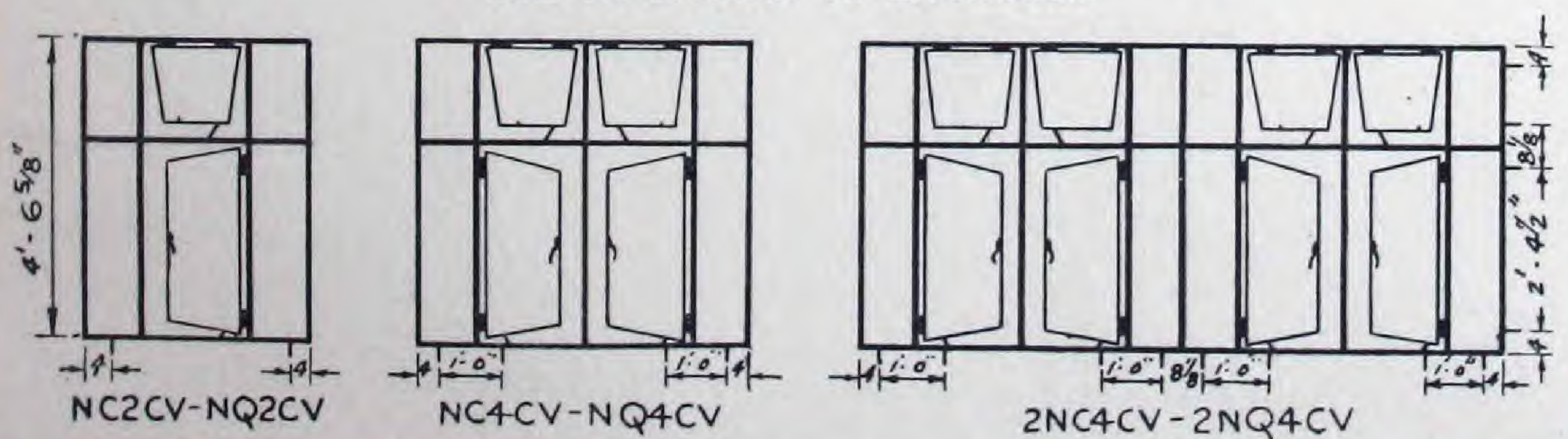
STANDARD COTTAGE CASEMENTS



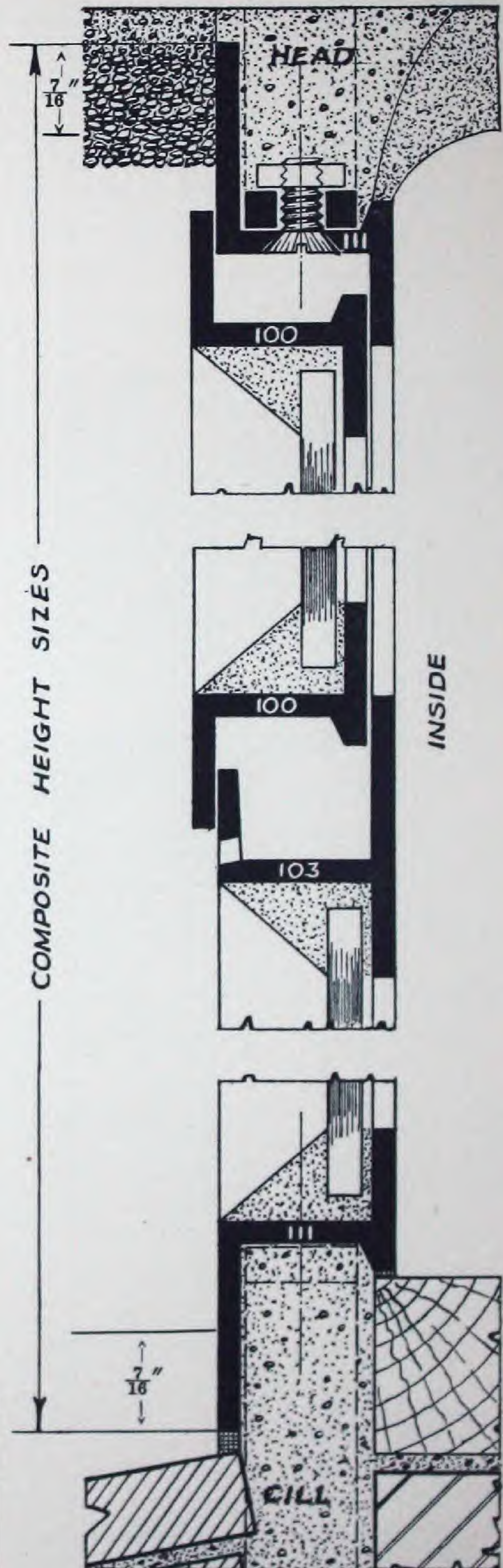
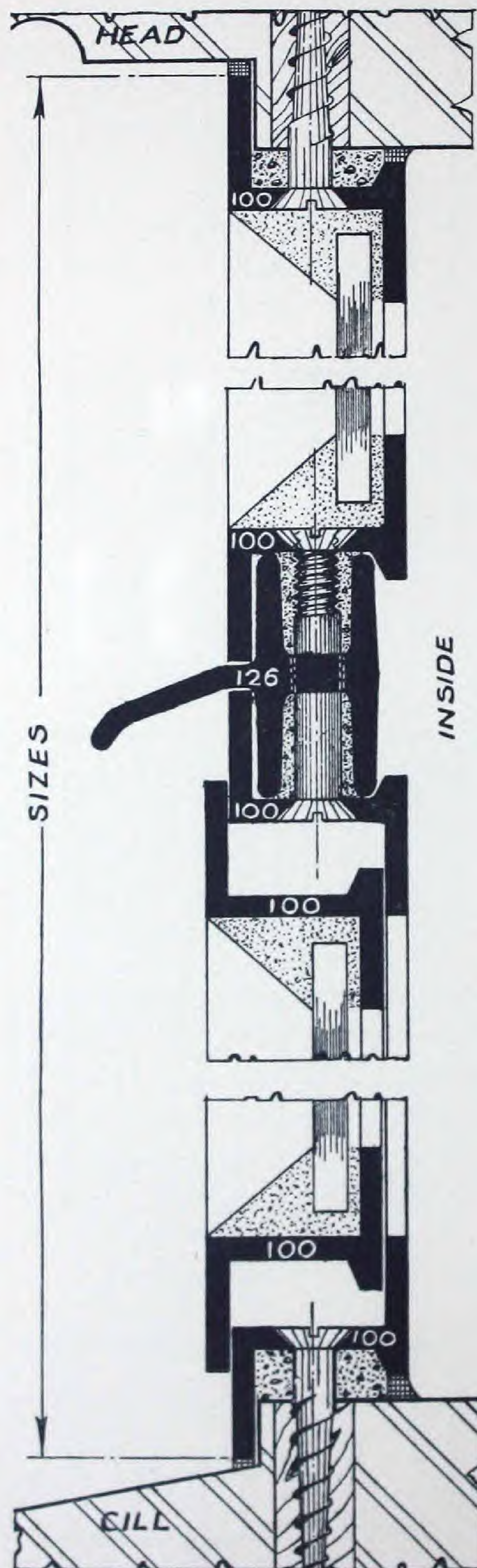
COUPLED TYPES

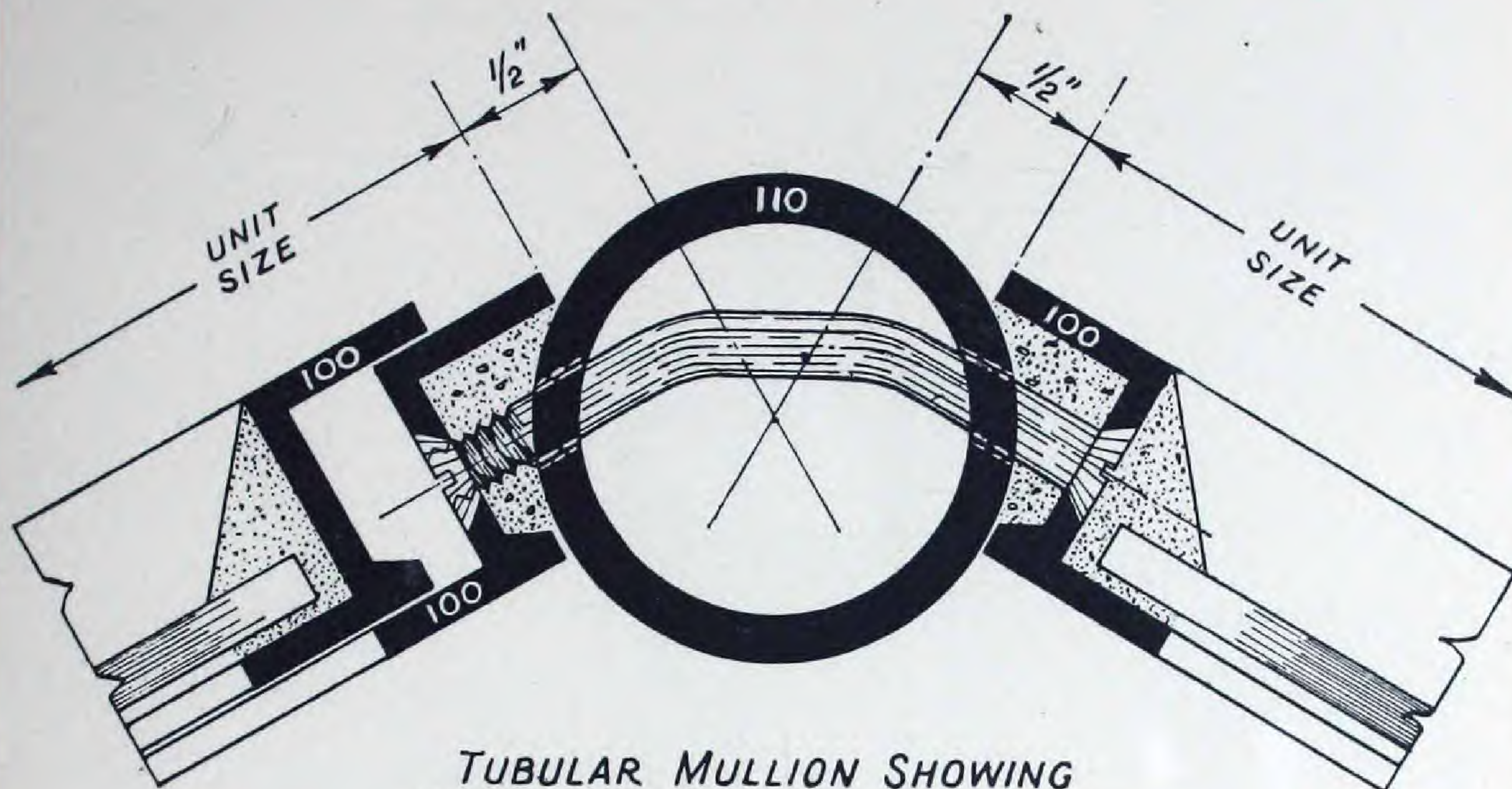


ACTUAL GLASS SIZES FOR ALL TYPES SHOWN ON THIS PAGE
WILL BE SUPPLIED ON APPLICATION.

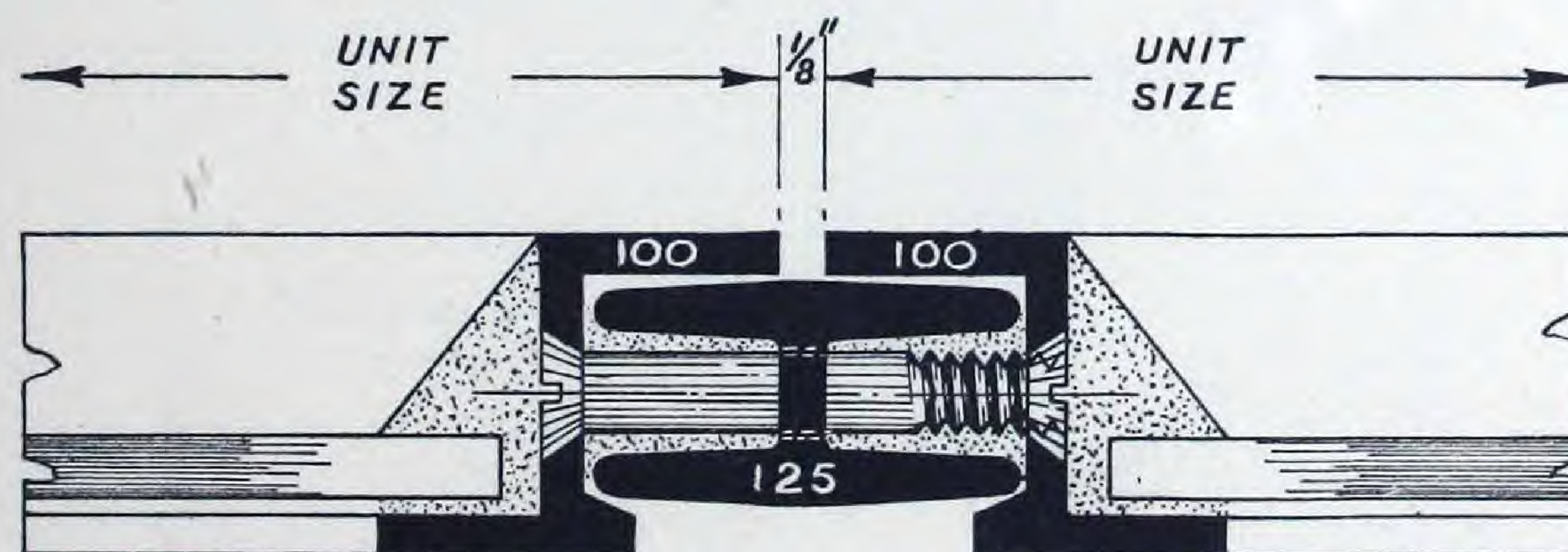


STANDARD COTTAGE CASEMENTS





*TUBULAR MULLION SHOWING
COUPLING OF ALL TYPES OF BAYS.*



COUPLING MULLION.

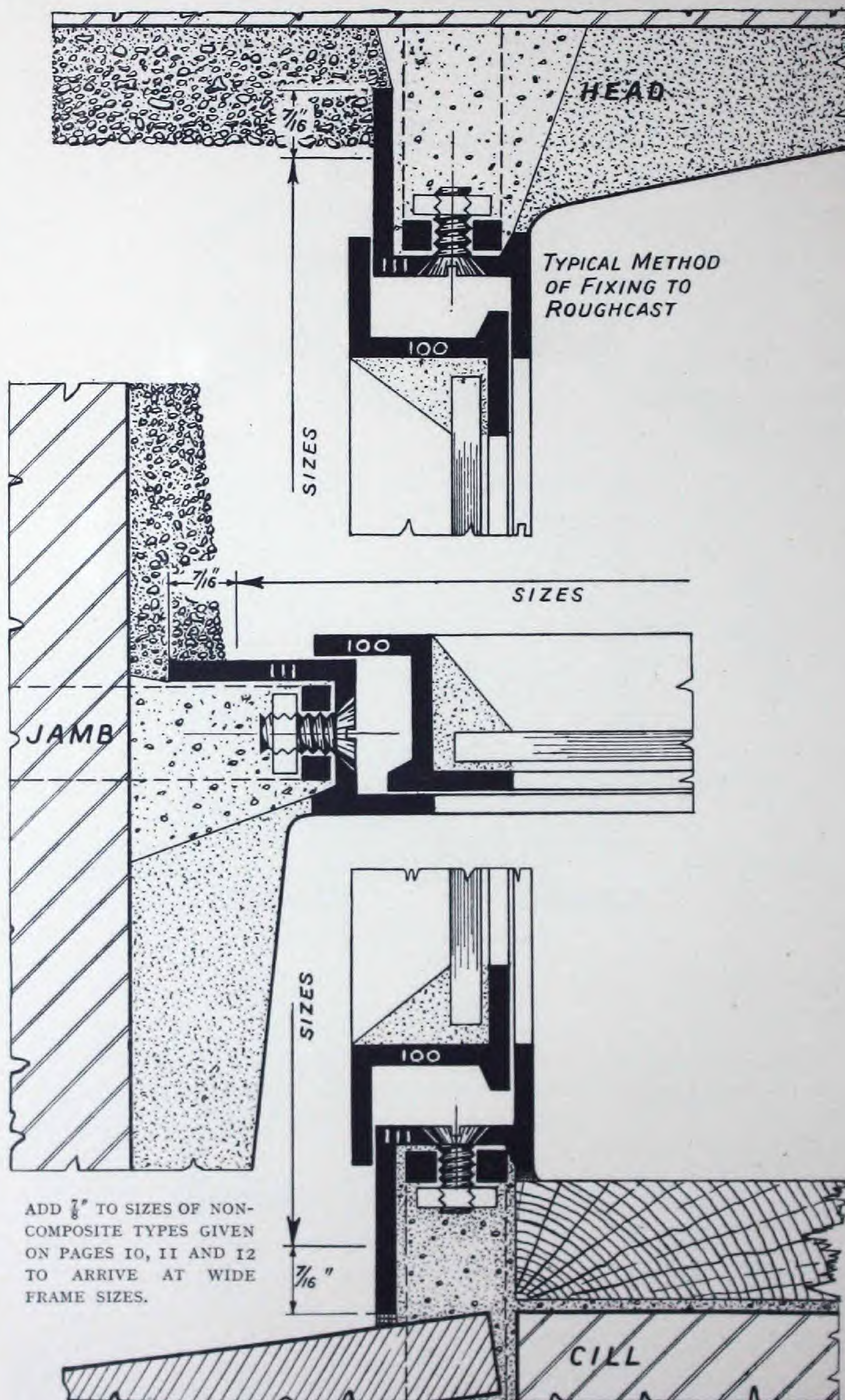
NOTE.

To obtain the overall size of Wide Frame Section Windows add $\frac{7}{8}$ " to height and width, except for composite type windows when heights remain standard, i.e., Type CE $5' 1\frac{7}{16}"$ and Type DE $6' 0\frac{15}{16}"$, and the width is increased by $\frac{7}{8}"$.

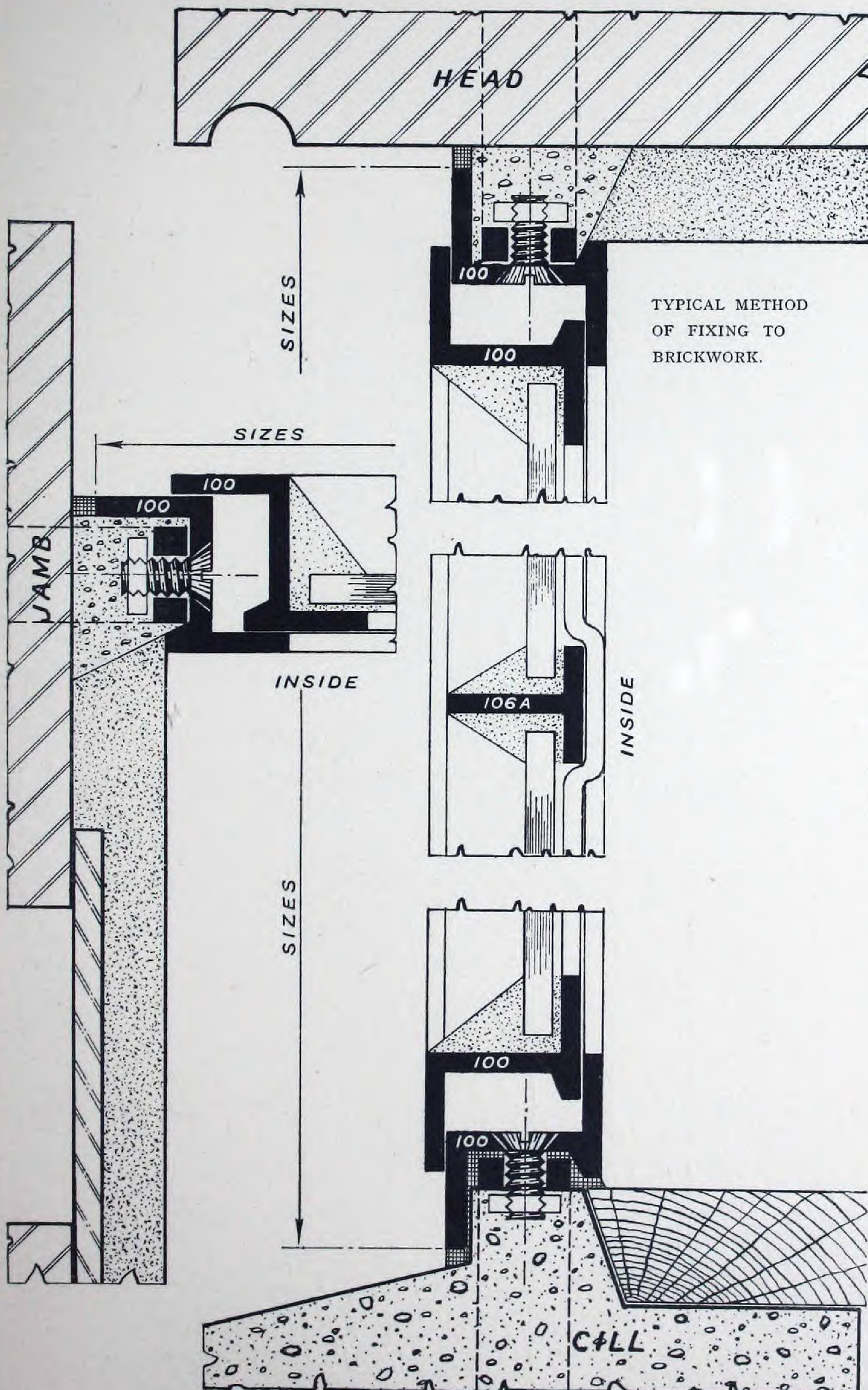
When ordering Wide Flanged Windows prefix the letter "W" to the type required, e.g., WD₂ or WND₂.

This wider section gives a much bolder appearance and better weathering where steel casements are being built direct into rough cast finished brick openings.

STANDARD COTTAGE CASEMENTS



FIXING DETAILS



STANDARD COTTAGE CASEMENTS

| TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width |
|------|------------------|--|--------------------------------------|------|------------------|--|--|------|------------------|--|--|
| | | inches | inches | | | inches | inches | | | ft. in. | ft. in. |
| G1 | 2 | 8 $\frac{11}{16}$ | 8 $\frac{9}{16}$ | Q9 | 12 | 8 $\frac{1}{16}$ | 9 $\frac{1}{16}$ | C8 | 8 4 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ |
| 2G1 | 4 | 8 $\frac{11}{16}$ | 8 $\frac{9}{16}$ | E1 | 4 | 10 $\frac{15}{16}$ | 8 $\frac{9}{16}$ | C9 | 12 6 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ |
| G2 | 2 2 | 8 $\frac{11}{16}$ 9 $\frac{11}{16}$ | 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ | 2E1 | 8 | 10 $\frac{15}{16}$ | 8 $\frac{9}{16}$ | NP1 | 1 | 3 3 $\frac{3}{8}$ | 1 5 $\frac{3}{8}$ |
| G3 | 4 2 | 9 $\frac{11}{16}$ 8 $\frac{11}{16}$ | 9 $\frac{1}{16}$ 8 $\frac{9}{16}$ | E2 | 4 4 | 10 $\frac{15}{16}$ 11 $\frac{7}{16}$ | 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ | 2NP1 | 2 | 3 3 $\frac{3}{8}$ | 1 5 $\frac{3}{8}$ |
| G4 | 4 2 | 8 $\frac{11}{16}$ 9 $\frac{11}{16}$ | 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ | E3 | 8 4 | 11 $\frac{7}{16}$ 10 $\frac{15}{16}$ | 9 $\frac{1}{16}$ 8 $\frac{9}{16}$ | NP2 | 1 1 | 3 3 $\frac{3}{8}$ 3 4 $\frac{3}{8}$ | 1 5 $\frac{3}{8}$ 1 6 $\frac{3}{8}$ |
| G5 | 2 | 9 $\frac{11}{16}$ | 9 $\frac{1}{16}$ | E4 | 8 4 | 10 $\frac{15}{16}$ 11 $\frac{7}{16}$ | 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ | NP3 | 2 1 | 3 4 $\frac{3}{8}$ 3 3 $\frac{3}{8}$ | 1 6 $\frac{3}{8}$ 1 5 $\frac{3}{8}$ |
| G6 | 1 | 8 $\frac{11}{16}$ | 8 $\frac{3}{8}$ | E5 | 4 | 11 $\frac{7}{16}$ | 9 $\frac{1}{16}$ | NP4 | 1 2 | 3 4 $\frac{3}{8}$ 3 3 $\frac{3}{8}$ | 1 6 $\frac{3}{8}$ 1 5 $\frac{3}{8}$ |
| G7 | 1 | 9 $\frac{11}{16}$ | 9 $\frac{3}{8}$ | E6 | 2 | 10 $\frac{15}{16}$ | 8 $\frac{3}{8}$ | NP5 | 1 | 3 4 $\frac{3}{8}$ | 1 6 $\frac{3}{8}$ |
| G8 | 4 | 9 $\frac{11}{16}$ | 9 $\frac{1}{16}$ | E7 | 2 | 11 $\frac{7}{16}$ | 9 $\frac{3}{8}$ | NP6 | 1 | 3 3 $\frac{3}{8}$ | 0 8 $\frac{3}{8}$ |
| G9 | 6 | 9 $\frac{11}{16}$ | 9 $\frac{1}{16}$ | E8 | 8 | 11 $\frac{7}{16}$ | 9 $\frac{1}{16}$ | NP7 | 1 | 3 4 $\frac{3}{8}$ | 0 9 $\frac{3}{8}$ |
| Q1 | 4 | 7 $\frac{9}{16}$ | 8 $\frac{9}{16}$ | E9 | 12 | 11 $\frac{7}{16}$ | 9 $\frac{1}{16}$ | NP8 | 2 | 3 4 $\frac{3}{8}$ | 1 6 $\frac{3}{8}$ |
| 2Q1 | 8 | 7 $\frac{9}{16}$ | 8 $\frac{9}{16}$ | C1 | 4 2 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{9}{16}$ 8 $\frac{9}{16}$ | NP9 | 3 | 3 4 $\frac{3}{8}$ | 1 6 $\frac{3}{8}$ |
| Q2 | 4 4 | 7 $\frac{9}{16}$ 8 $\frac{9}{16}$ | 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ | 2C1 | 8 4 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{9}{16}$ 8 $\frac{9}{16}$ | D1 | 4 4 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| Q3 | 8 4 | 8 $\frac{1}{16}$ 7 $\frac{9}{16}$ | 9 $\frac{1}{16}$ 8 $\frac{9}{16}$ | C2 | 4 2 4 2 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ 11 $\frac{9}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{9}{16}$ 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ 9 $\frac{1}{16}$ | 2D1 | 8 8 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| Q4 | 4 8 | 8 $\frac{1}{16}$ 7 $\frac{9}{16}$ | 9 $\frac{1}{16}$ 8 $\frac{9}{16}$ | C3 | 4 2 8 4 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ 11 $\frac{9}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{9}{16}$ 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ 9 $\frac{1}{16}$ | D2 | 4 4 4 4 | 0 II $\frac{3}{16}$ 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{1}{16}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ |
| Q5 | 4 | 8 $\frac{1}{16}$ | 9 $\frac{1}{16}$ | C4 | 8 4 4 2 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ 11 $\frac{9}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{9}{16}$ 8 $\frac{9}{16}$ 9 $\frac{1}{16}$ 9 $\frac{1}{16}$ | D3 | 8 8 4 4 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| Q6 | 2 | 7 $\frac{9}{16}$ | 8 $\frac{3}{8}$ | C5 | 4 2 | 11 $\frac{9}{16}$ 11 $\frac{3}{16}$ | 9 $\frac{1}{16}$ 9 $\frac{1}{16}$ | D4 | 8 8 4 4 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{1}{16}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ |
| Q7 | 2 | 8 $\frac{1}{16}$ | 9 $\frac{3}{8}$ | C6 | 2 1 | 11 $\frac{1}{16}$ 11 $\frac{3}{16}$ | 8 $\frac{3}{8}$ 8 $\frac{3}{8}$ | D5 | 4 4 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ |
| Q8 | 8 | 8 $\frac{1}{16}$ | 9 $\frac{1}{16}$ | C7 | 2 1 | 11 $\frac{9}{16}$ 11 $\frac{3}{16}$ | 9 $\frac{3}{8}$ 9 $\frac{3}{8}$ | D6 | 2 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ | 0 8 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ |

GLAZING SIZES

| TYPE | Panes | Height | Width | TYPE | Panes | Height | Width | TYPE | Panes | Height | Width |
|-------|------------------|--|--|------|-----------------------|--|--|------|-----------------------|--|--|
| D7 | 2 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{3}{8}$ 0 9 $\frac{3}{8}$ | BB6 | I I | 2 IO 0 II $\frac{1}{16}$ | 0 8 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ | D2F | 4 4 2 4 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| D8 | 8 8 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ | BB7 | I I | 2 IO $\frac{1}{2}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{3}{8}$ 0 9 $\frac{3}{8}$ | D3F | 6 8 4 4 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| D9 | 12 12 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ | BB8 | 2 4 | 2 IO $\frac{1}{2}$ 0 II $\frac{3}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | D4F | 8 8 2 4 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| AA1 | I 2 | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ | BB9 | 3 6 | 2 IO $\frac{1}{2}$ 0 II $\frac{3}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | D5F | 2 4 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| 2/AA1 | 2 4 | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ | E5F | 2 2 | 0 II $\frac{7}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | D7F | I 2 I | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{3}{8}$ 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ |
| AA2 | I 2 I 2 | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ I II 0 II $\frac{9}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | E7F | I I | 0 II $\frac{7}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ | D8F | 6 8 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| AA3 | I 2 2 4 | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ I II 0 II $\frac{9}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | C2F | 4 2 2 2 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | AA2F | I I 2 2 | I IO $\frac{1}{2}$ I II 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| AA4 | 2 4 I 2 | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ I II 0 II $\frac{9}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | C3F | 4 2 6 4 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | AA3F | 2 I 2 2 2 | I II I IO $\frac{1}{2}$ 0 II $\frac{9}{16}$ 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| AA5 | I 2 | I II 0 II $\frac{9}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | C4F | 8 4 2 2 2 | 0 II $\frac{1}{16}$ 0 II $\frac{3}{16}$ 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | AA4F | 2 I 4 2 | I IO $\frac{1}{2}$ I II 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| AA6 | I I | I IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ | 0 8 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ | C5F | 2 2 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | AA5F | I 2 | I II 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ |
| AA7 | I I | I II 0 II $\frac{9}{16}$ | 0 9 $\frac{3}{8}$ 0 9 $\frac{3}{8}$ | C7F | I I I | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{3}{8}$ 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ | AA7F | I I | I II 0 IO $\frac{5}{8}$ | 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ |
| AA8 | 2 4 | I II 0 II $\frac{9}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | C8F | 6 4 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | AA8F | 2 2 2 | I II 0 II $\frac{9}{16}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| AA9 | 3 6 | I II 0 II $\frac{9}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | C9F | 10 6 2 | 0 II $\frac{9}{16}$ 0 II $\frac{3}{16}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{1}{16}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | BB2F | I I 2 2 | 2 IO $\frac{1}{2}$ 2 IO 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| BB1 | I 2 | 2 IO 0 II $\frac{1}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ | NP2F | I I I | 3 3 $\frac{3}{8}$ 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ | BB3F | 2 I 2 2 2 | 2 IO $\frac{1}{2}$ 2 IO 0 II $\frac{9}{16}$ 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| 2/BB1 | 2 4 | 2 IO 0 II $\frac{1}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ | NP3F | I I I I | 3 3 $\frac{3}{8}$ 3 4 $\frac{3}{8}$ 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ | BB4F | 2 I 4 2 | 2 IO 2 IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ 0 IO $\frac{5}{8}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 8 $\frac{9}{16}$ |
| BB2 | I 2 2 | 2 IO 0 II $\frac{1}{16}$ 0 II $\frac{9}{16}$ | I 5 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ | NP4F | 2 I I | 3 3 $\frac{3}{8}$ 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ | BB5F | I 2 | 2 IO $\frac{1}{2}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ |
| BB3 | 2 I 4 2 | 2 IO $\frac{1}{2}$ 2 IO 0 II $\frac{9}{16}$ 0 II $\frac{1}{16}$ | I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ | NP5F | I I | 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ | BB7F | I I | 2 IO $\frac{1}{2}$ 0 IO $\frac{5}{8}$ | 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ |
| BB4 | 2 I 4 2 | 2 IO 2 IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ 0 II $\frac{9}{16}$ | I 5 $\frac{3}{8}$ I 6 $\frac{3}{8}$ 0 8 $\frac{9}{16}$ 0 9 $\frac{1}{16}$ | NP7F | I I | 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | 0 9 $\frac{3}{8}$ 0 8 $\frac{3}{8}$ | BB8F | 2 2 2 | 2 IO $\frac{1}{2}$ 0 II $\frac{9}{16}$ 0 IO $\frac{5}{8}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ 0 8 $\frac{9}{16}$ |
| BB5 | I 2 | 2 IO $\frac{1}{2}$ 0 II $\frac{1}{16}$ | I 6 $\frac{3}{8}$ 0 9 $\frac{1}{16}$ | NP8F | I I I | 3 4 $\frac{3}{8}$ 2 0 $\frac{3}{8}$ I 2 $\frac{1}{16}$ | I 6 $\frac{3}{8}$ I 6 $\frac{3}{8}$ I 5 $\frac{3}{8}$ | L1 | 4 | 0 IO $\frac{11}{16}$ | 0 8 $\frac{3}{16}$ |

LEAD GLAZING



"NG" TYPES



"NQ" TYPES



"NE" TYPES



"NC" TYPES

F. VENT
TYPE



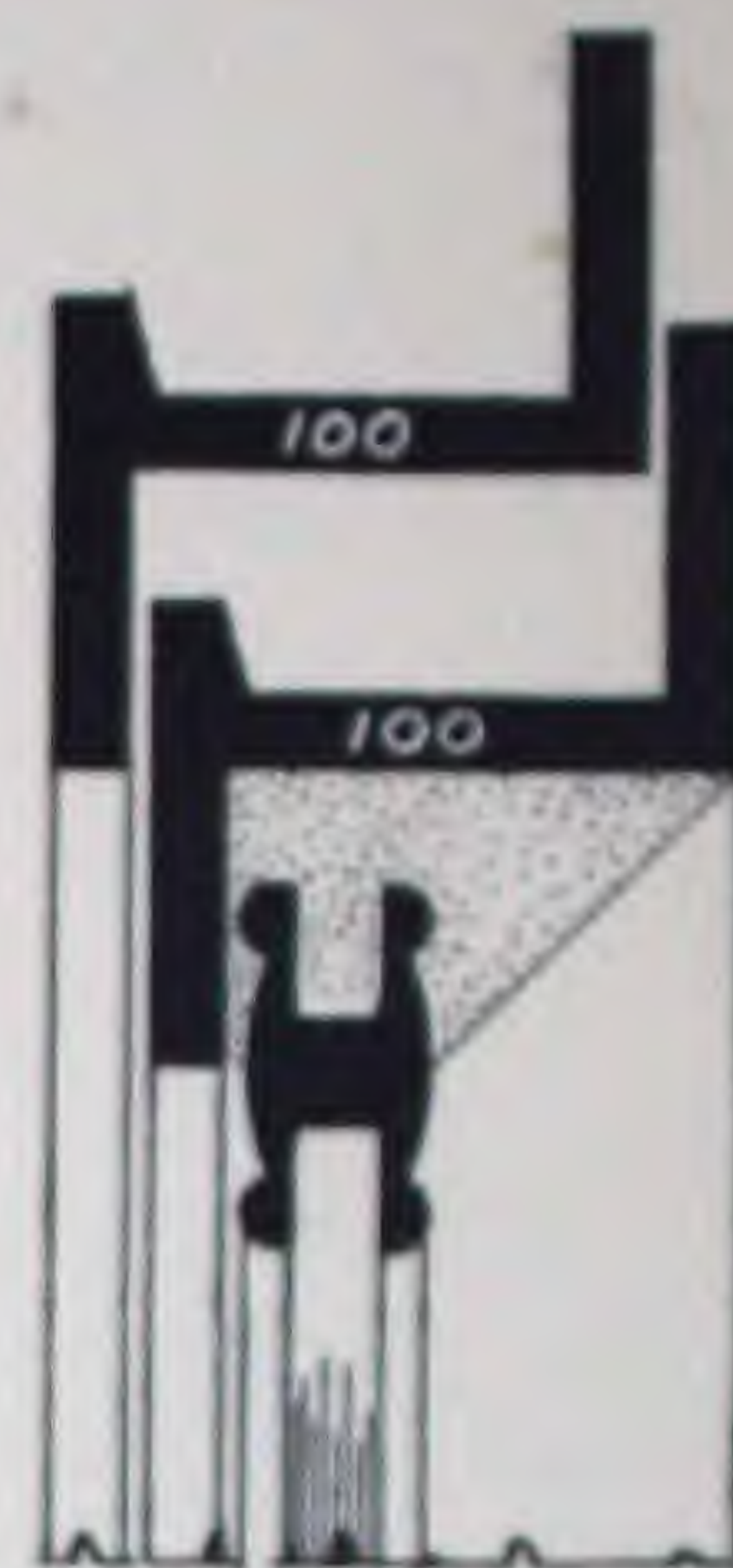
"NP" TYPES

F. VENT
TYPE



"ND" TYPES

F. VENT
TYPE



OUTSIDE



The use of Lead Glazing is becoming increasingly popular and to meet the growing demand, we are producing a range of Standard leaded lights for use in conjunction with Reliance Standard Cottage casements.

These Standard Panels are made to fit every "N" (no glazing bar) type of casement. To ensure that these panels will give every satisfaction; no panel is despatched until at least three weeks after manufacture. This ensures that the cement in which the glass is bedded has had time to set properly and the glass, therefore, will not work loose in transit.

Reliance Standard Lead Glazing is made in approximately 6-in. x 8-in. squares with 1/2-in. flat or round comes, reinforced horizontally where necessary with steel cores, no saddle bars being necessary.

Panels are glazed with 21-oz. sheet glass as standard.

Diamond panes, special designs and various qualities of glass can be supplied. Any deviations from the Standard however, not only increase the cost, but also the time necessary for delivery.

Full size details and types of lead glazing are shown on the previous page.

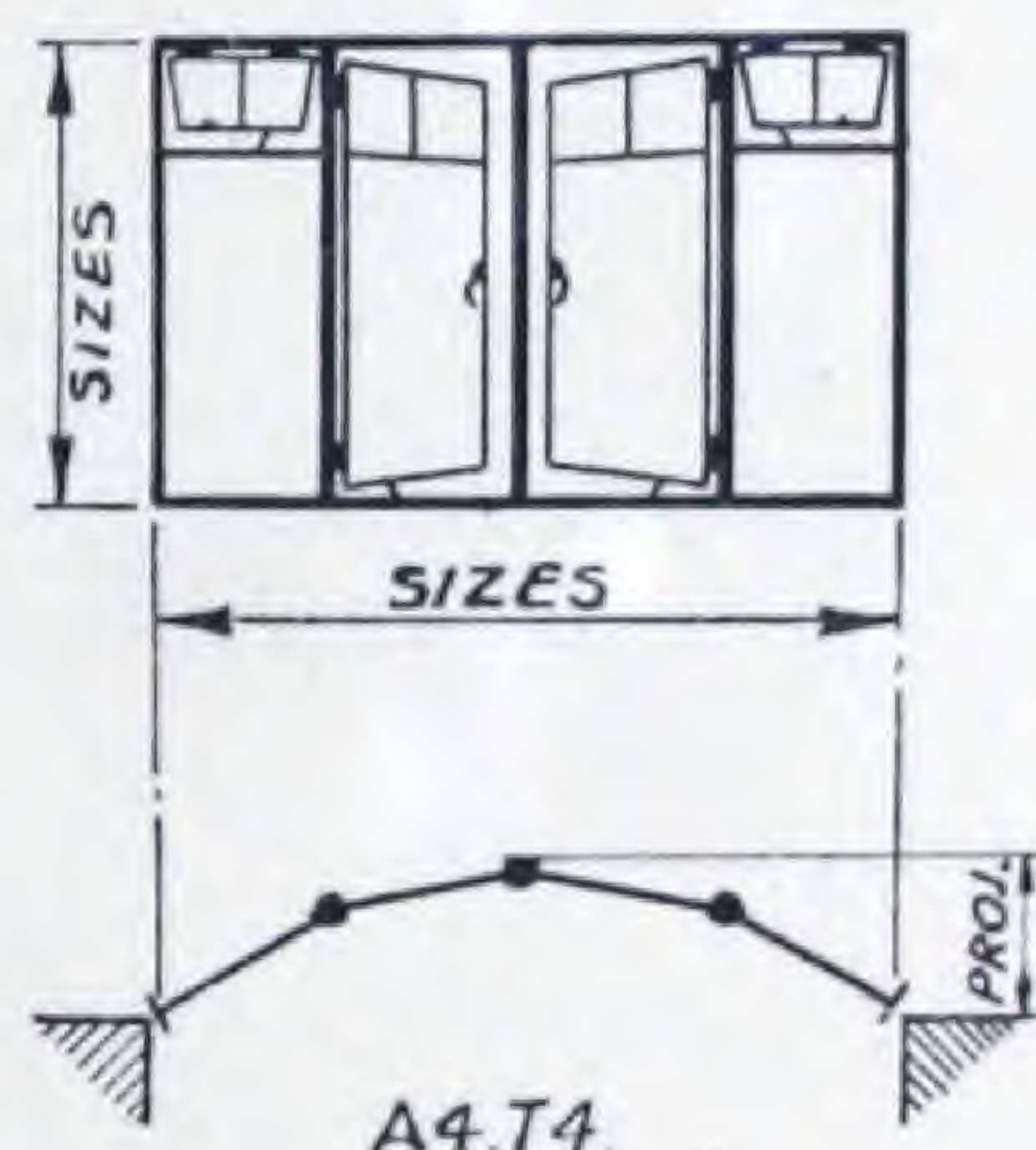
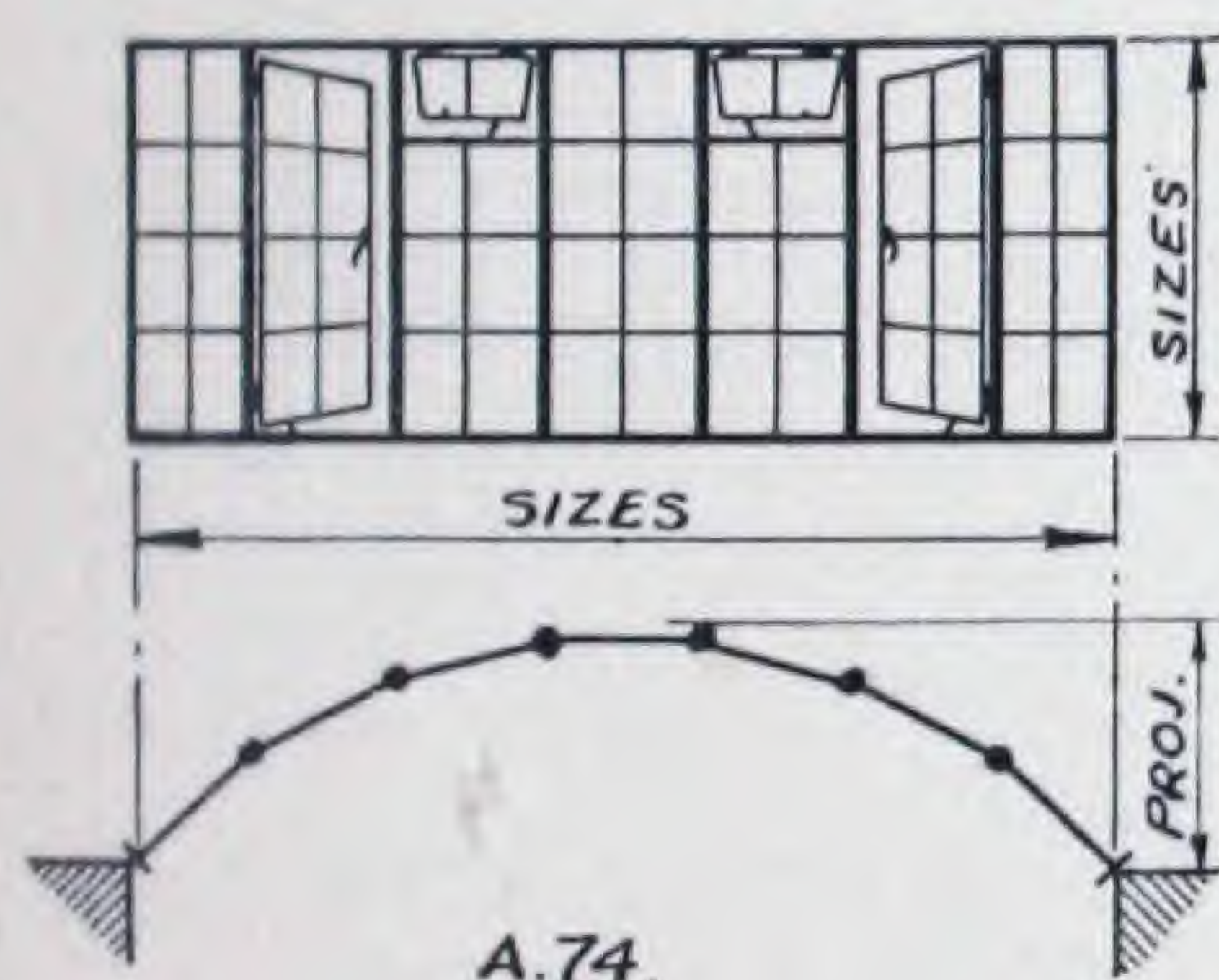
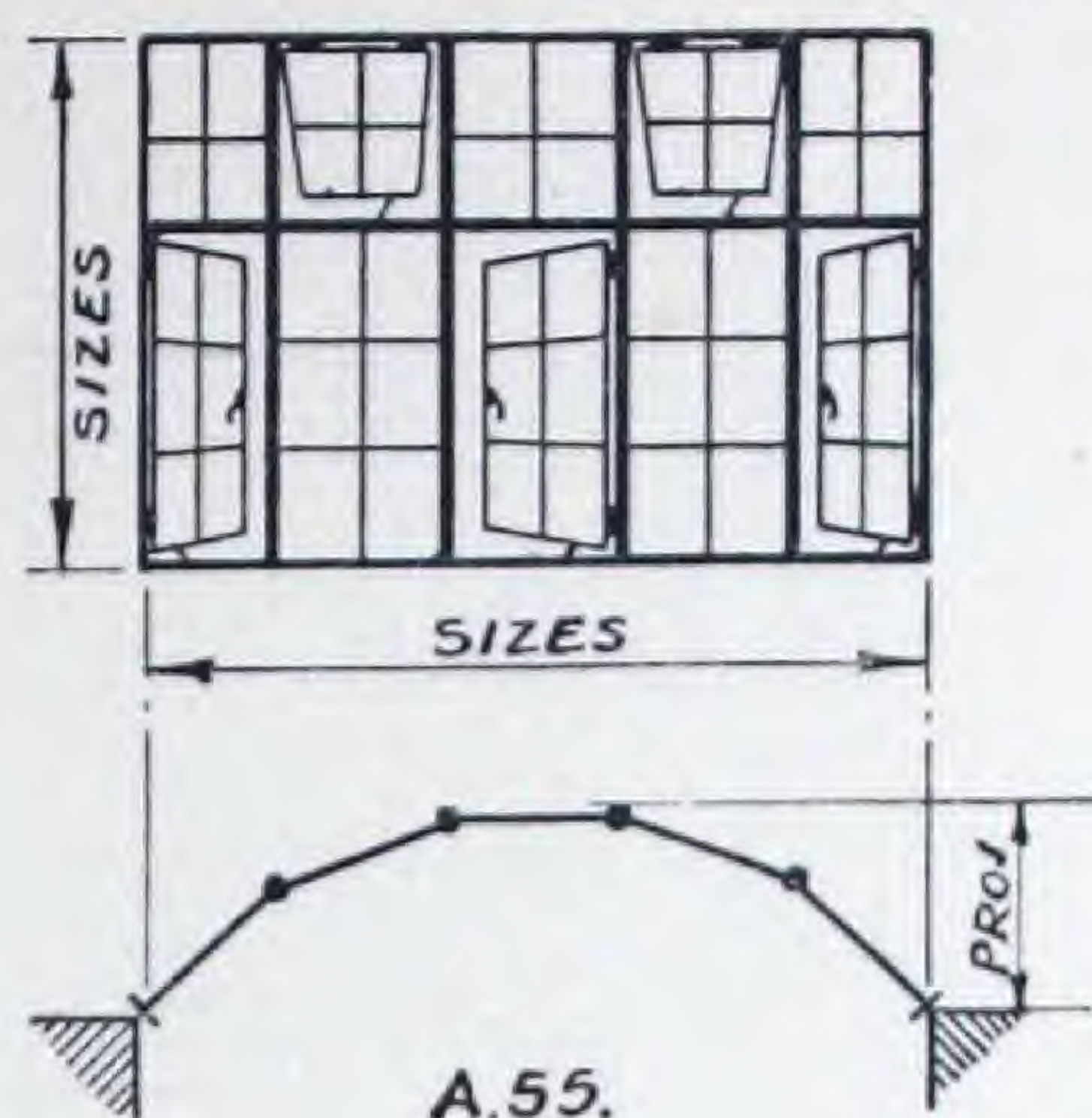
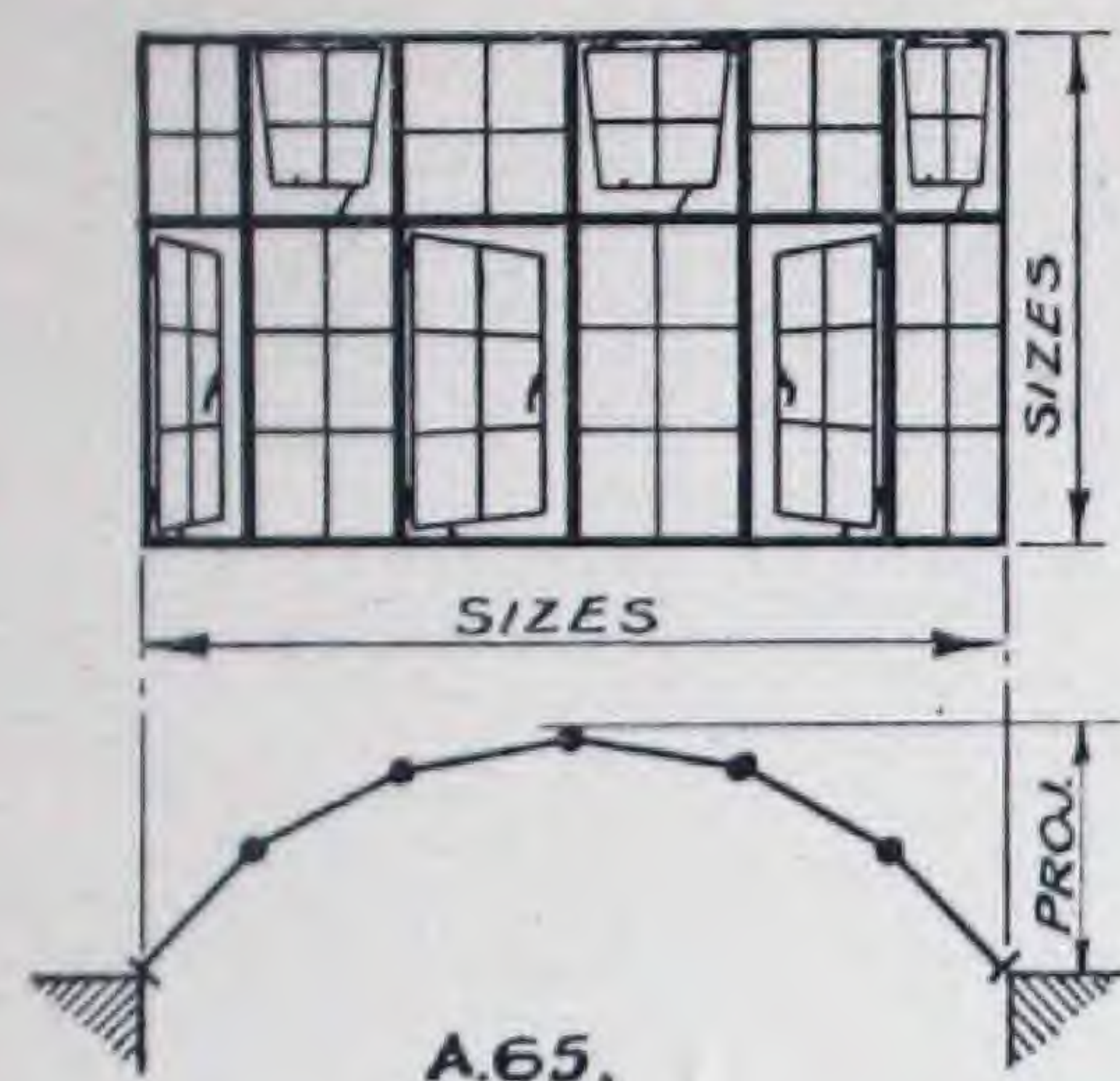
STANDARD BAY WINDOWS

Practically any design and size of Bay Window can be obtained by coupling together Reliance Standard Cottage Units with tubular Steel Mullion or Wood Corner posts. Details of these are shown on pages 25 to 28. The use of Wood Surrounds gives the window a bolder appearance and often facilitates erection.

Reliance Bay Windows are made Splayed, Square, Circular, Square-splayed, and Oriel.

For convenience in transport and to obviate the risk of damage, Bay Windows coupled with Steel Tubular Mullions are despatched unassembled. Assembling on the Site is a very simple matter by means of the Reliance special cranked coupling bolt, shown on page 17.

CIRCULAR BAYS



OVERALL SIZES OF CIRCULAR BAYS

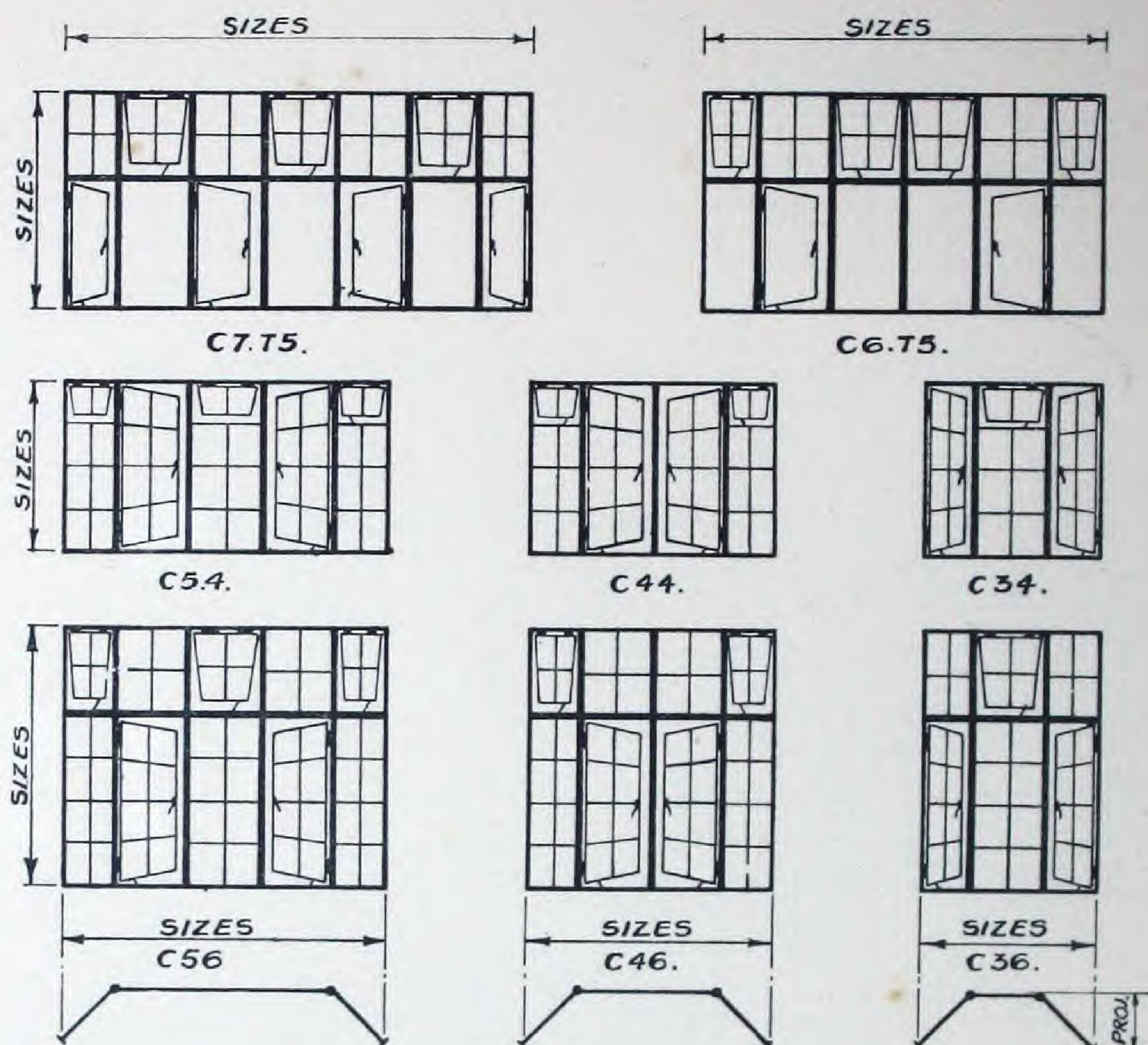
| Types | Lights Wide | Height | Width | Proj. | Types | Lights Wide | Height | Width | Proj. |
|-------|-------------|---------------------|---------------------|---------------------|-------|-------------|---------------------|---------------------|---------------------|
| A43 | 4 | ft. 3 ins. 0 1/2 | ft. 6 ins. 4 7/8 | ft. 1 ins. 3 1/8 | A63 | 6 | ft. 3 ins. 0 1/2 | ft. 9 ins. 0 7/8 | ft. 2 ins. 3 1/8 |
| A44 | 4 | 4 0 | 6 4 7/8 | 1 3 1/8 | A64 | 6 | 4 0 | 9 0 7/8 | 2 3 1/8 |
| A45 | 4 | 5 1 7/16 | 6 4 7/8 | 1 3 1/8 | A65 | 6 | 5 1 7/16 | 9 0 7/8 | 2 3 1/8 |
| A46 | 4 | 6 0 1/16 | 6 4 7/8 | 1 3 1/8 | A66 | 6 | 6 0 1/16 | 9 0 7/8 | 2 3 1/8 |
| A53 | 5 | 3 0 1/2 | 7 7 1/16 | 1 9 1/16 | A73 | 7 | 3 0 1/2 | 10 0 1/16 | 2 11 1/16 |
| A54 | 5 | 4 0 | 7 7 1/16 | 1 9 1/16 | A74 | 7 | 4 0 | 10 0 1/16 | 2 11 1/16 |
| A55 | 5 | 5 1 7/16 | 7 7 1/16 | 1 9 1/16 | A75 | 7 | 5 1 7/16 | 10 0 1/16 | 2 11 1/16 |
| A56 | 5 | 6 0 1/16 | 7 7 1/16 | 1 9 1/16 | A76 | 7 | 6 0 1/16 | 10 0 1/16 | 2 11 1/16 |

NOTE.—For Bays without internal Glazing Bars add the letter "N" to the identification type, e.g. A6N5.

For Bays with Glazing Bars above transome only, as AA, BB, NC-E, ND-E types, add the letter "T," e.g. A7T5.

For easy cleaning Hinges add the letter "X," e.g. A7T5X.

SPLAY BAYS

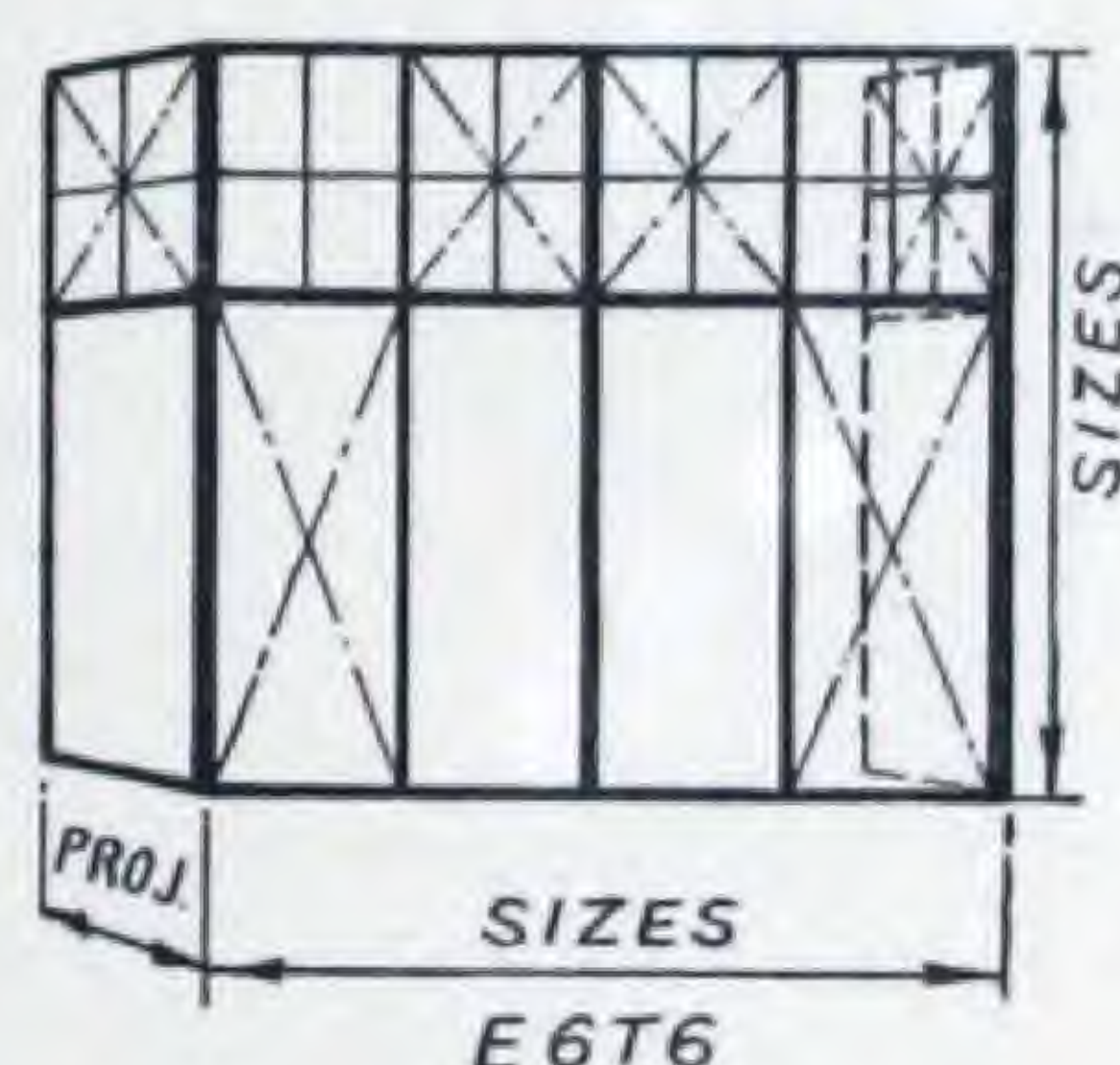
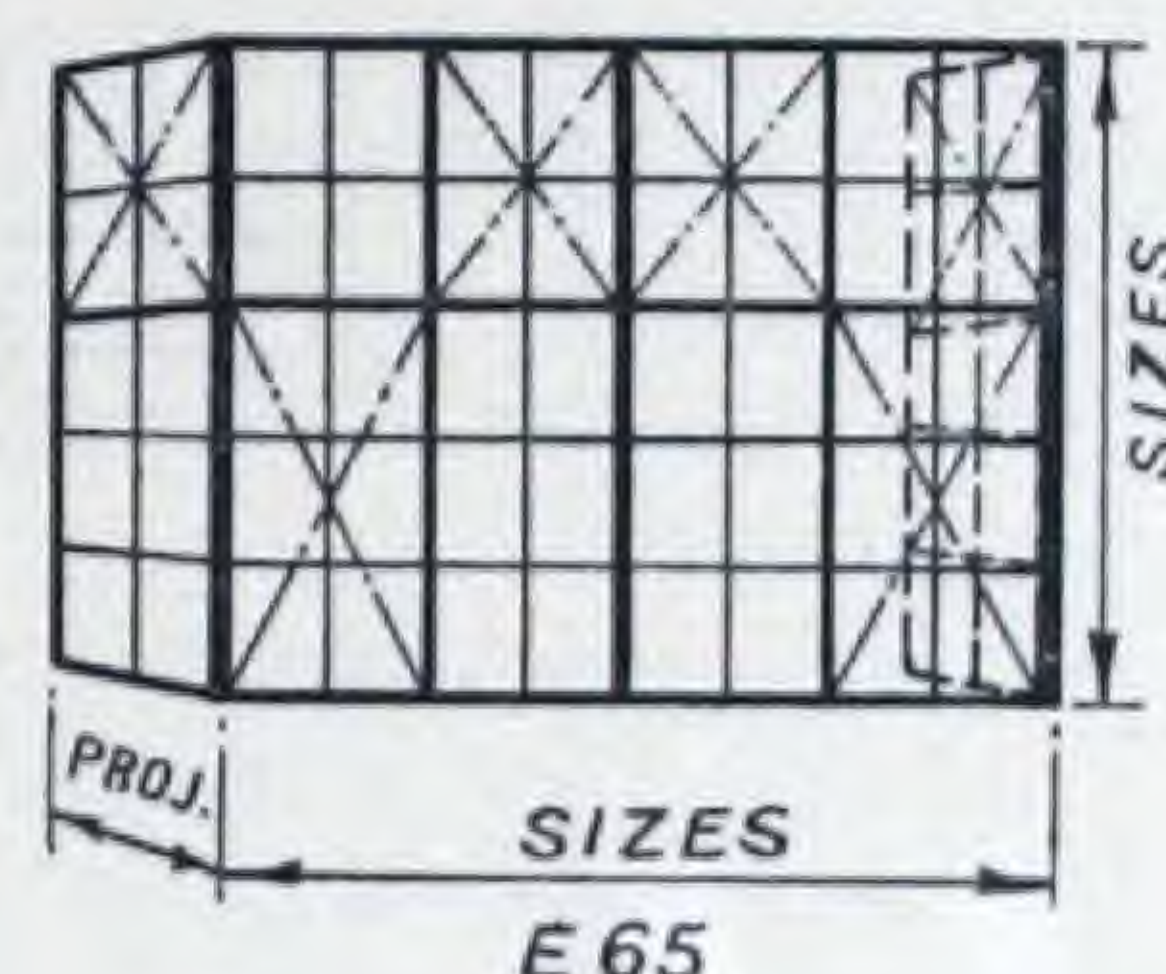
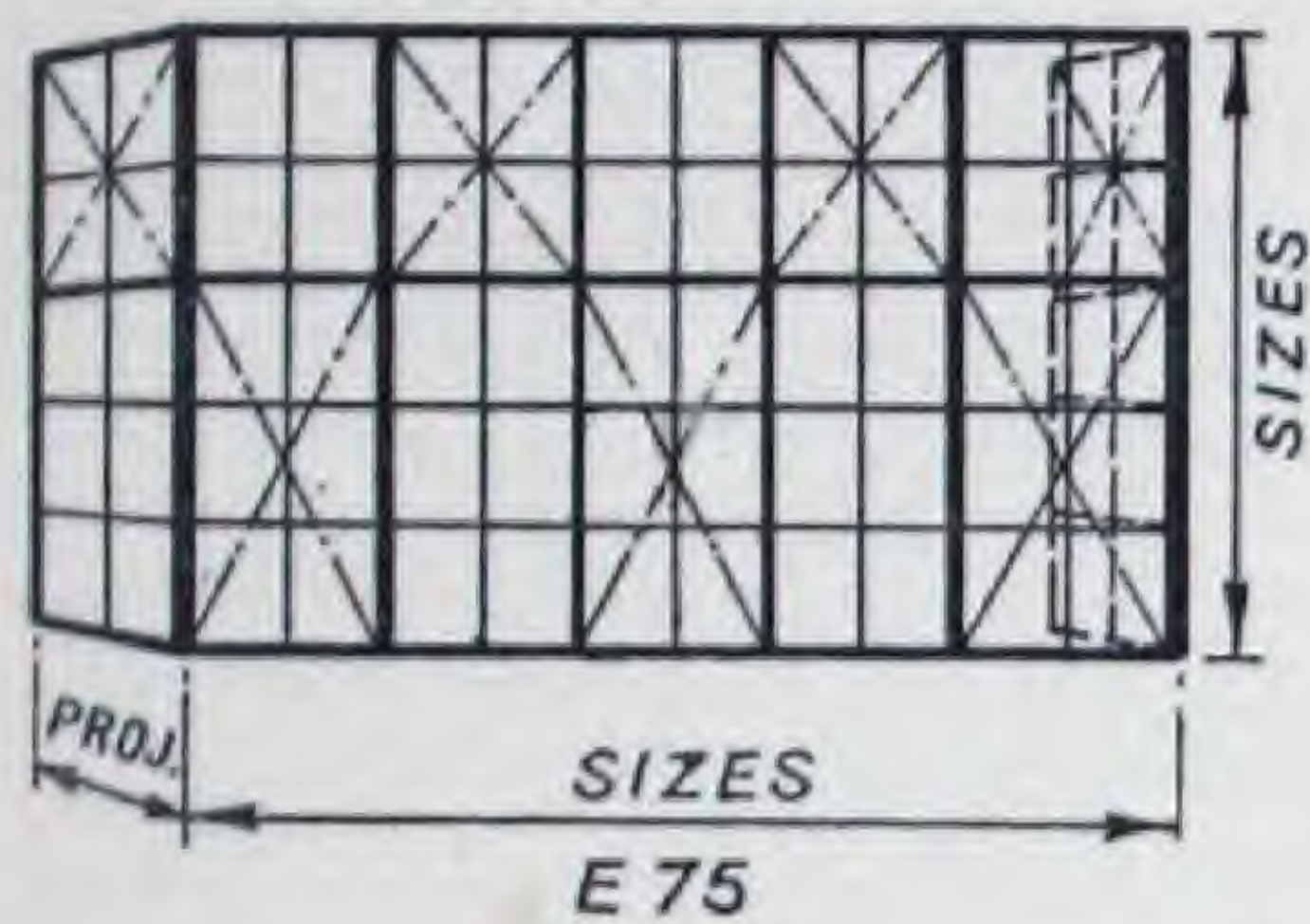
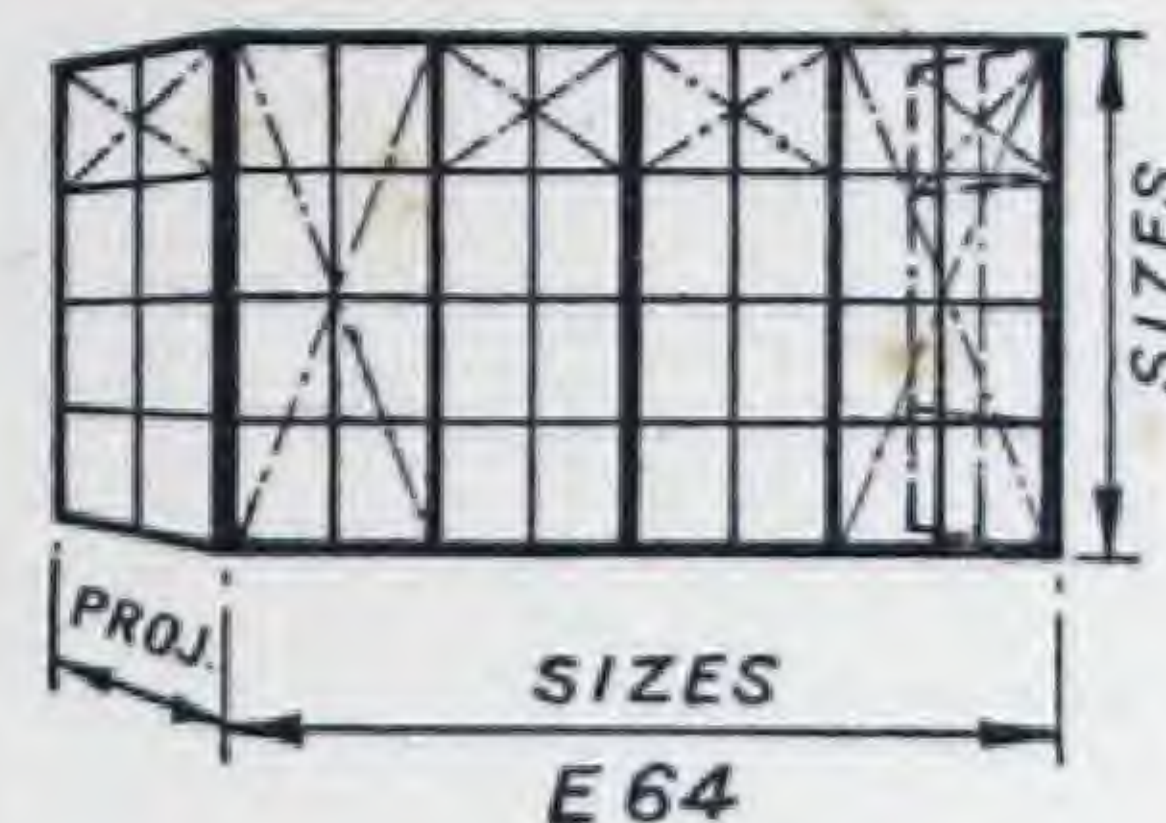
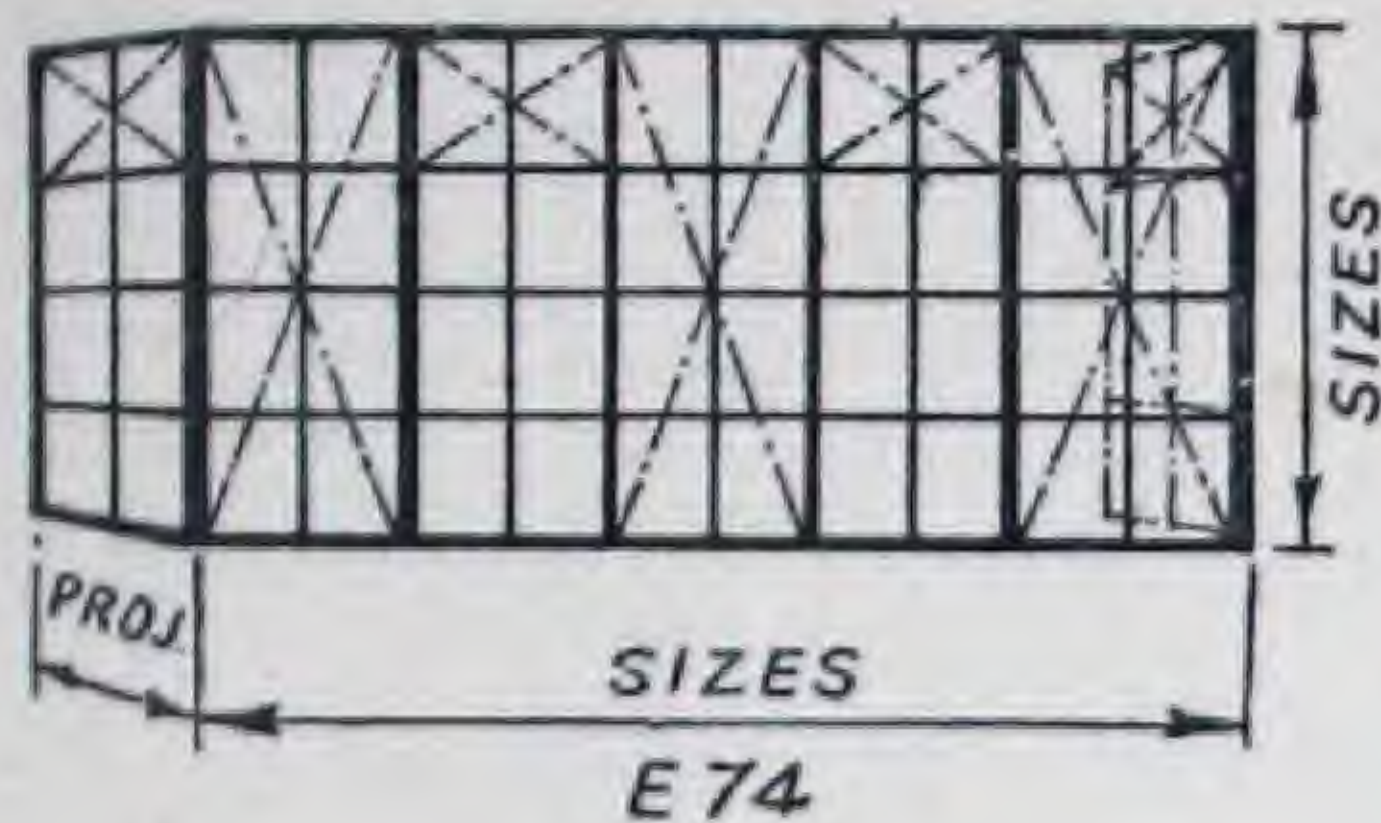


OVERALL SIZES OF SPLAYED BAYS

| 30° BAYS | | | | | 45° BAYS | | | | | 60° BAYS | | | | |
|----------|-------------|----------|----------|-------------------------|----------|-------------|----------|----------|---------------------------|----------|-------------|----------|----------|---------------------------|
| Types | Lights Wide | Height | Width | Proj. | Types | Lights Wide | Height | Width | Proj. | Types | Lights Wide | Height | Width | Proj. |
| | | ft. ins. | ft. ins. | | | | ft. ins. | ft. ins. | | | | ft. ins. | ft. ins. | |
| B33 | 3 | 3 0 1/2 | 4 9 1/4 | All Projections 10 1/8" | C33 | 3 | 3 0 1/2 | 4 3 1/4 | All Projections 1' 2 1/8" | D33 | 3 | 3 0 1/2 | 3 7 | All Projections 1' 6 1/8" |
| B34 | 3 | 4 0 | 4 9 1/4 | | C34 | 3 | 4 0 | 4 3 1/4 | | D34 | 3 | 4 0 | 3 7 | |
| B35 | 3 | 5 1 7/16 | 4 9 1/4 | | C35 | 3 | 5 1 7/16 | 4 3 1/4 | | D35 | 3 | 5 1 7/16 | 3 7 | |
| B36 | 3 | 6 0 1/8 | 4 9 1/4 | | C36 | 3 | 6 0 1/8 | 4 3 1/4 | | D36 | 3 | 6 0 1/8 | 3 7 | |
| B43 | 4 | 3 0 1/2 | 6 4 3/8 | | C43 | 4 | 3 0 1/2 | 5 10 1/8 | | D43 | 4 | 3 0 1/2 | 5 2 1/8 | |
| B44 | 4 | 4 0 | 6 4 3/8 | | C44 | 4 | 4 0 | 5 10 1/8 | | D44 | 4 | 4 0 | 5 2 1/8 | |
| B45 | 4 | 5 1 7/16 | 6 4 3/8 | | C45 | 4 | 5 1 7/16 | 5 10 1/8 | | D45 | 4 | 5 1 7/16 | 5 2 1/8 | |
| B46 | 4 | 6 0 1/8 | 6 4 3/8 | | C46 | 4 | 6 0 1/8 | 5 10 1/8 | | D46 | 4 | 6 0 1/8 | 5 2 1/8 | |
| B53 | 5 | 3 0 1/2 | 7 11 1/2 | | C53 | 5 | 3 0 1/2 | 7 5 1/2 | | D53 | 5 | 3 0 1/2 | 6 9 1/4 | |
| B54 | 5 | 4 0 | 7 11 1/2 | | C54 | 5 | 4 0 | 7 5 1/2 | | D54 | 5 | 4 0 | 6 9 1/4 | |
| B55 | 5 | 5 1 7/16 | 7 11 1/2 | | C55 | 5 | 5 1 7/16 | 7 5 1/2 | | D55 | 5 | 5 1 7/16 | 6 9 1/4 | |
| B56 | 5 | 6 0 1/8 | 7 11 1/2 | | C56 | 5 | 6 0 1/8 | 7 5 1/2 | | D56 | 5 | 6 0 1/8 | 6 9 1/4 | |
| B63 | 6 | 3 0 1/2 | 9 7 7/8 | | C63 | 6 | 3 0 1/2 | 9 1 1/8 | | D63 | 6 | 3 0 1/2 | 8 5 1/8 | |
| B64 | 6 | 4 0 | 9 7 7/8 | | C64 | 6 | 4 0 | 9 1 1/8 | | D64 | 6 | 4 0 | 8 5 1/8 | |
| B65 | 6 | 5 1 7/16 | 9 7 7/8 | | C65 | 6 | 5 1 7/16 | 9 1 1/8 | | D65 | 6 | 5 1 7/16 | 8 5 1/8 | |
| B66 | 6 | 6 0 1/8 | 9 7 7/8 | | C66 | 6 | 6 0 1/8 | 9 1 1/8 | | D66 | 6 | 6 0 1/8 | 8 5 1/8 | |
| B73 | 7 | 3 0 1/2 | 11 3 3/4 | | C73 | 7 | 3 0 1/2 | 10 9 1/2 | | D73 | 7 | 3 0 1/2 | 10 1 1/2 | |
| B74 | 7 | 4 0 | 11 3 3/4 | | C74 | 7 | 4 0 | 10 9 1/2 | | D74 | 7 | 4 0 | 10 1 1/2 | |
| B75 | 7 | 5 1 7/16 | 11 3 3/4 | | C75 | 7 | 5 1 7/16 | 10 9 1/2 | | D75 | 7 | 5 1 7/16 | 10 1 1/2 | |
| B76 | 7 | 6 0 1/8 | 11 3 3/4 | | C76 | 7 | 6 0 1/8 | 10 9 1/2 | | D76 | 7 | 6 0 1/8 | 10 1 1/2 | |

NOTE.—For Bays without internal Glazing Bars add the letter "N" to the identification type, e.g. B6N5.
For Bays with Glazing Bars above transome only as AA, BB, NC-E, ND-E types add letter "T," e.g. B6T5.
For easy cleaning Hinges add letter "X," e.g. C7T5X.

SQUARE BAYS



OVERALL SIZES OF SQUARE BAYS

| Types | Lights Wide | Height | Width | Proj. | Types | Lights Wide | Height | Width | Proj. |
|-------|-------------|---------------------|-----------------|---------------------|-------|-------------|----------------------|---------------------|---------------------|
| E53 | 5 | ft. 3 ins. 0 1/2 | ft. 5 ins. 1 | ft. 1 ins. 9 3/8 | E65 | 6 | ft. 5 ins. 1 7/16 | ft. 6 ins. 9 1/8 | ft. 1 ins. 9 3/8 |
| E54 | 5 | 4 0 | 5 1 | 1 9 3/8 | E66 | 6 | 6 0 15/16 | 6 9 1/8 | 1 9 3/8 |
| E55 | 5 | 5 1 7/16 | 5 1 | 1 9 3/8 | E73 | 7 | 3 0 1/2 | 8 5 1/4 | 1 9 3/8 |
| E56 | 5 | 6 0 15/16 | 5 1 | 1 9 3/8 | E74 | 7 | 4 0 | 8 5 1/4 | 1 9 3/8 |
| E63 | 6 | 3 0 1/2 | 6 9 1/8 | 1 9 3/8 | E75 | 7 | 5 1 7/16 | 8 5 1/4 | 1 9 3/8 |
| E64 | 6 | 4 0 | 6 9 1/8 | 1 9 3/8 | E76 | 7 | 6 0 15/16 | 8 5 1/4 | 1 9 3/8 |

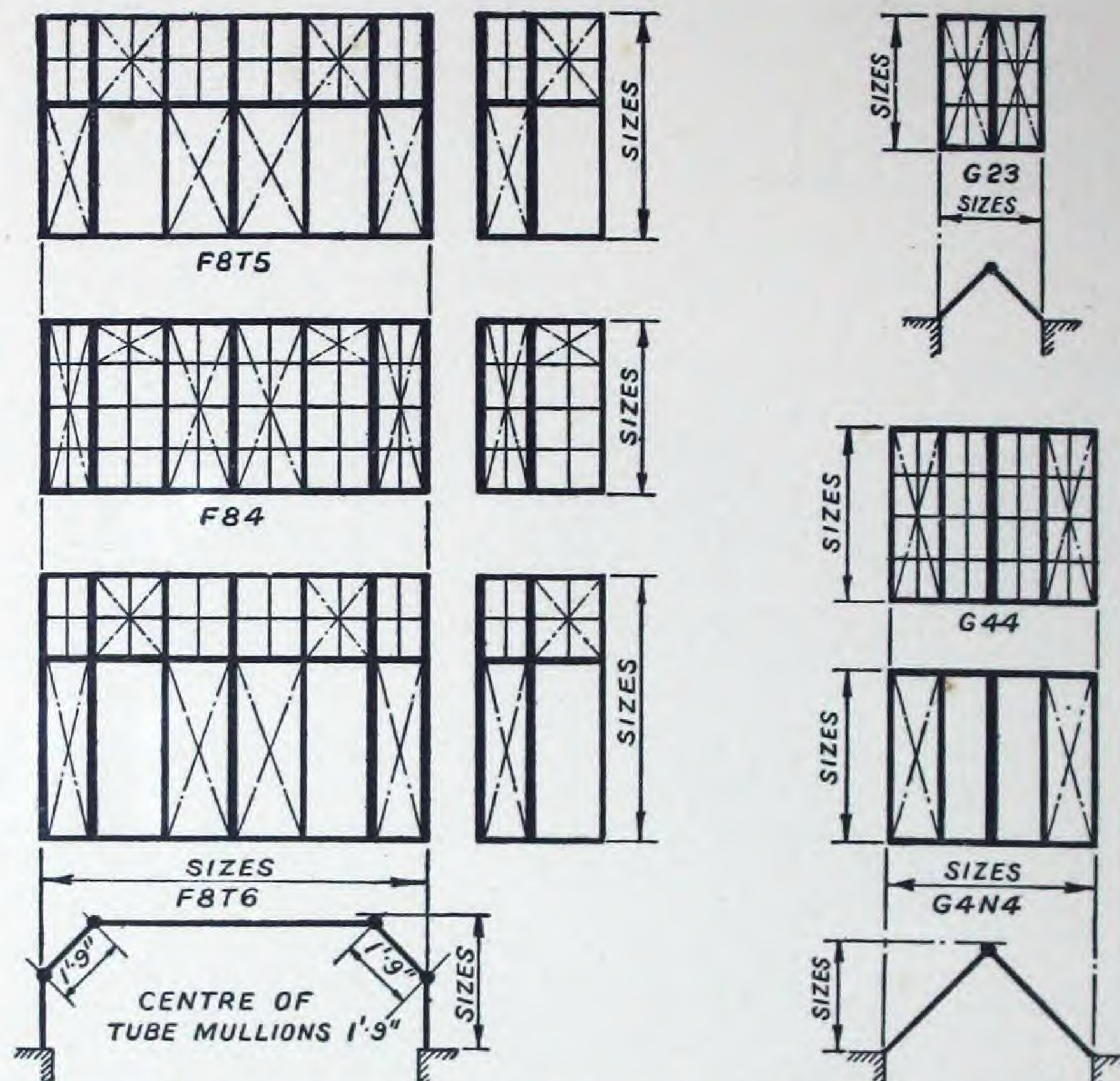
NOTE.—For Ventilators of 5 light Bays see 5 light Splay Bays, page 26.

NOTE.—For Bays without internal Glazing Bars add the letter "N" to the identification type, e.g. E7N7.

For Bays with Glazing Bars above transome only, as AA, BB, NC-E, ND-E types, add letter "T," e.g. E6T7.

For easy cleaning Hinges add letter "X," e.g. E6T7X.

SQUARE SPLAYED BAYS



OVERALL SIZES OF SQUARE SPLAY AND ORIEL BAYS

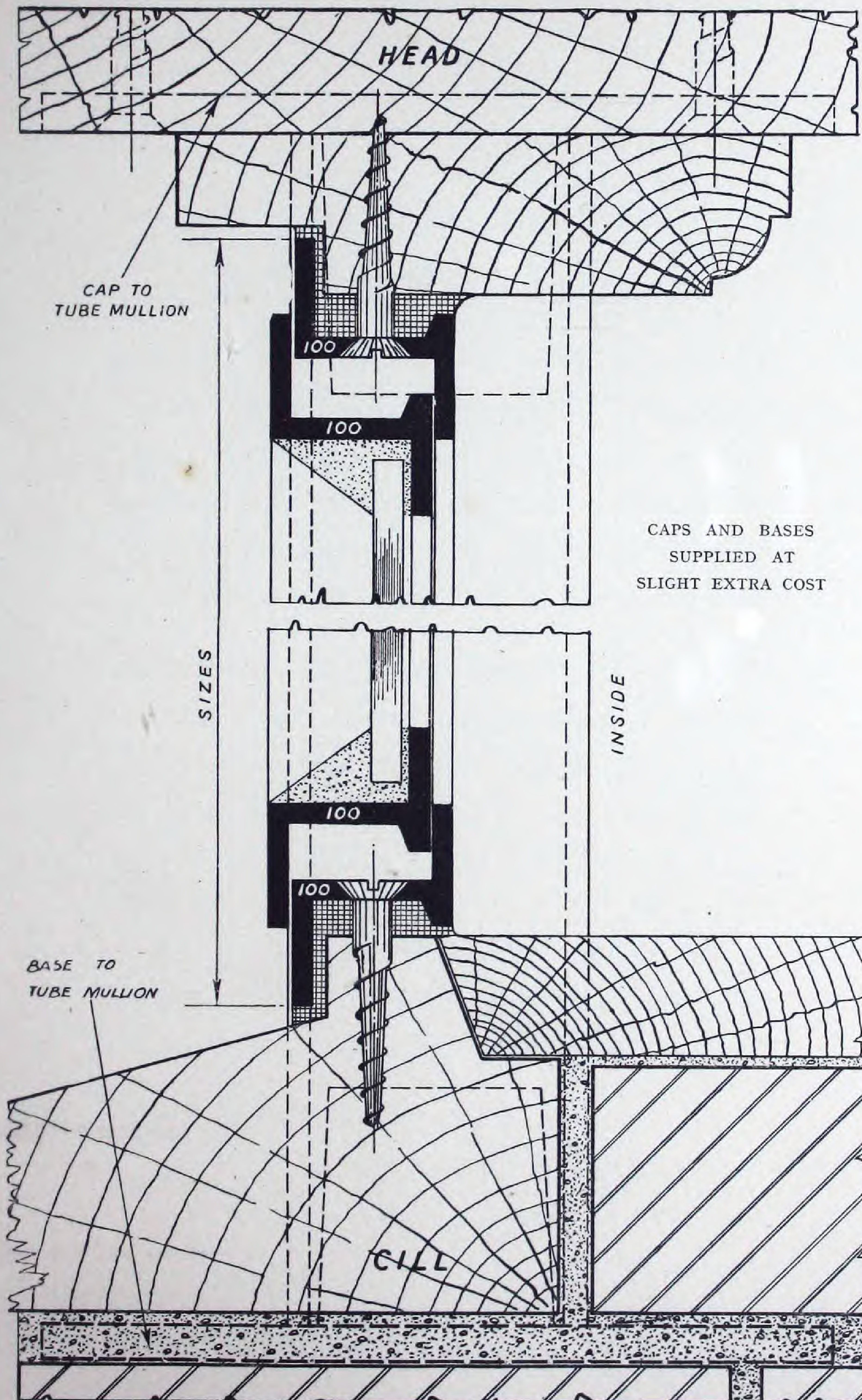
| Types | Lights Wide | Height | Width | Proj. | Types | Lights Wide | Height | Width | Proj. |
|--|-------------|---------------------|----------------------|---------------------|-------|-------------|----------------------|---------------------|---------------------|
| F63 | 6 | ft. 3 0 1/2 ins. | ft. 5 11 3/8 ins. | ft. 3 0 1/4 ins. | F85 | 8 | ft. 5 1 7/16 ins. | ft. 9 2 3/8 ins. | ft. 3 0 1/4 ins. |
| F64 | 6 | 4 0 | 5 11 3/8 | 3 0 1/4 | F86 | 8 | 6 0 1/16 | 9 2 3/8 | 3 0 1/4 |
| F65 | 6 | 5 1 7/16 | 5 11 3/8 | 3 0 1/4 | ORIEL | | | | |
| F66 | 6 | 6 0 1/16 | 5 11 3/8 | 3 0 1/4 | | | | | |
| F73 | 7 | 3 0 1/2 | 7 6 1/2 | 3 0 1/4 | G23 | 2 | 3 0 1/2 | 2 6 3/8 | 1 2 1/16 |
| F74 | 7 | 4 0 | 7 6 1/2 | 3 0 1/4 | G24 | 2 | 4 0 | 2 6 3/8 | 1 2 1/16 |
| F75 | 7 | 5 1 7/16 | 7 6 1/2 | 3 0 1/4 | G25 | 2 | 5 1 7/16 | 2 6 3/8 | 1 2 1/16 |
| F76 | 7 | 6 0 1/16 | 7 6 1/2 | 3 0 1/4 | G26 | 2 | 6 0 1/16 | 2 6 3/8 | 1 2 1/16 |
| For Ventilators of the above types see 6 and 7 Light Splay Bays on page 18. | | | | | G43 | 4 | 3 0 1/2 | 4 9 1/2 | 2 4 7/16 |
| | | | | | G44 | 4 | 4 0 | 4 9 1/2 | 2 4 7/16 |
| F83 | 8 | 3 0 1/2 | 9 2 3/8 | 3 0 1/4 | G45 | 4 | 5 1 7/16 | 4 9 1/2 | 2 4 7/16 |
| F84 | 8 | 4 0 | 9 2 3/8 | 3 0 1/4 | G46 | 4 | 6 0 1/16 | 4 9 1/2 | 2 4 7/16 |

NOTE.—For Bays without Glazing Bars add the letter "N" to the identification type, e.g. F6N5.

For Bays with Glazing Bars above transome only, as AA, BB, NC-E, ND-E type add letter "T," e.g., F6T5.

For easy cleaning Hinges add the letter "X," e.g. F6T5X.

BAY WINDOWS FIXING DETAILS



THE USE OF WOOD SURROUNDS

in conjunction with Reliance Standard Cottage Windows materially assists erection and at the same time is usually more economical than the practice of obtaining Wood surrounds from a separate supplier and screwing in the metal windows.

Standard Wood Surrounds for all Reliance Windows are made from selected seasoned timber, the heads and jambs being out of $3\frac{1}{2}$ " by $2\frac{1}{2}$ " Deal and the cills out of 6" by 3" Oak. Surrounds can also be supplied in 3" by 2" and 4" by 3" heads and jambs with 6" by 3" Oak or Deal cill. Timber to any special dimensions can be supplied on request.

For specifications of Reliance Wood Surrounds see page 38.

OVERALL SIZES TO BAYS

CIRCULAR.

| No. of Lights Wide. | PROJ. | | WIDTH | | PROJ. | | WIDTH | | PROJ. | | WIDTH | |
|---------------------|-------|-------------------|-------|------------------|-------|-------------------|-------|-----------------|-------|-------------------|-------|------------------|
| | ft. | in. | ft. | in. | ft. | in. | ft. | in. | ft. | in. | ft. | in. |
| THREE LIGHTS .. | 0 | 8 $\frac{1}{8}$ | 5 | 3 | 0 | 8 $\frac{3}{8}$ | 5 | 4 $\frac{1}{2}$ | 0 | 8 $\frac{9}{16}$ | 5 | 6 |
| FOUR LIGHTS .. | 1 | 3 $\frac{15}{16}$ | 6 | 8 $\frac{1}{2}$ | 1 | 4 $\frac{1}{4}$ | 6 | 10 | 1 | 4 $\frac{9}{16}$ | 6 | 11 $\frac{1}{2}$ |
| FIVE LIGHTS .. | 1 | 11 $\frac{1}{8}$ | 7 | 11 $\frac{1}{4}$ | 1 | 11 $\frac{5}{8}$ | 8 | 0 $\frac{3}{4}$ | 2 | 0 $\frac{1}{8}$ | 8 | 2 $\frac{1}{4}$ |
| SIX LIGHTS .. | 2 | 5 $\frac{3}{16}$ | 9 | 4 $\frac{7}{8}$ | 2 | 5 $\frac{11}{16}$ | 9 | 6 $\frac{3}{8}$ | 2 | 6 $\frac{3}{16}$ | 9 | 7 $\frac{7}{8}$ |
| SEVEN LIGHTS .. | 3 | 1 $\frac{7}{16}$ | 10 | 4 $\frac{3}{8}$ | 3 | 2 $\frac{1}{16}$ | 10 | 5 $\frac{7}{8}$ | 3 | 2 $\frac{11}{16}$ | 10 | 7 $\frac{3}{8}$ |

SQUARE.

| No. of Lights Wide | PROJ. | | WIDTH | | PROJ. | | WIDTH | | PROJ. | | WIDTH | |
|--------------------|-------|------------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|
| | ft. | in. | ft. | in. | ft. | in. | ft. | in. | ft. | in. | ft. | in. |
| FIVE LIGHTS .. | 1 | 11 $\frac{5}{8}$ | 5 | 2 $\frac{7}{8}$ | 2 | 0 $\frac{5}{8}$ | 5 | 3 $\frac{7}{8}$ | 2 | 1 $\frac{5}{8}$ | 5 | 4 $\frac{7}{8}$ |
| SIX LIGHTS .. | 1 | 11 $\frac{5}{8}$ | 6 | 11 | 2 | 0 $\frac{5}{8}$ | 7 | 0 | 2 | 1 $\frac{5}{8}$ | 7 | 1 |
| SEVEN LIGHTS .. | 1 | 11 $\frac{5}{8}$ | 8 | 7 $\frac{1}{8}$ | 2 | 0 $\frac{5}{8}$ | 8 | 8 $\frac{1}{8}$ | 2 | 1 $\frac{5}{8}$ | 8 | 9 $\frac{1}{8}$ |

SPLAYED.

| No. of Lights Wide | THREE LIGHTS | | FOUR LIGHTS | | FIVE LIGHTS | | SIX LIGHTS | | SEVEN LIGHTS | | ANGLE OF BAY | PROJ. | |
|---|--------------|-------------------|-------------|------------------|-------------|------------------|------------|------------------|--------------|-------------------|--------------|-------|--------------------|
| | ft. | in. | ft. | in. | ft. | in. | ft. | in. | ft. | in. | | ft. | in. |
| OVERALL WIDTH OF WINDOWS WITH SINGLE SIDE LIGHTS. | 5 | 1 $\frac{1}{8}$ | 6 | 8 $\frac{1}{4}$ | 8 | 3 $\frac{3}{8}$ | 9 | 11 $\frac{1}{2}$ | 11 | 7 $\frac{5}{8}$ | 30° | 0 | 10 $\frac{3}{4}$ |
| | 5 | 2 | 6 | 9 $\frac{1}{8}$ | 8 | 4 $\frac{1}{4}$ | 10 | 0 $\frac{3}{8}$ | 11 | 8 $\frac{1}{2}$ | | 0 | 11 $\frac{1}{2}$ |
| | 5 | 3 $\frac{1}{2}$ | 6 | 10 $\frac{5}{8}$ | 8 | 5 $\frac{3}{4}$ | 10 | 1 $\frac{7}{8}$ | 11 | 10 | | 0 | 11 $\frac{13}{16}$ |
| | 4 | 7 $\frac{1}{16}$ | 6 | 2 $\frac{3}{16}$ | 7 | 9 $\frac{5}{16}$ | 9 | 5 $\frac{7}{16}$ | 11 | 1 $\frac{9}{16}$ | 45° | 1 | 4 |
| | 4 | 8 $\frac{5}{8}$ | 6 | 3 $\frac{3}{4}$ | 7 | 10 $\frac{7}{8}$ | 9 | 7 | 11 | 3 $\frac{1}{8}$ | | 1 | 4 $\frac{1}{2}$ |
| | 4 | 10 $\frac{3}{16}$ | 6 | 5 $\frac{5}{16}$ | 8 | 0 $\frac{7}{16}$ | 9 | 8 $\frac{9}{16}$ | 11 | 4 $\frac{11}{16}$ | | 1 | 5 |
| | 3 | 10 $\frac{3}{8}$ | 5 | 5 $\frac{1}{2}$ | 7 | 0 $\frac{5}{8}$ | 8 | 8 $\frac{3}{4}$ | 10 | 4 $\frac{7}{8}$ | 60° | 1 | 7 $\frac{13}{16}$ |
| | 3 | 11 $\frac{3}{4}$ | 5 | 6 $\frac{7}{8}$ | 7 | 2 | 8 | 10 $\frac{1}{8}$ | 10 | 6 $\frac{1}{4}$ | | 1 | 8 $\frac{1}{2}$ |
| | 4 | 1 $\frac{1}{4}$ | 5 | 8 $\frac{3}{8}$ | 7 | 3 $\frac{1}{2}$ | 8 | 11 $\frac{5}{8}$ | 10 | 7 $\frac{3}{4}$ | | 1 | 9 $\frac{3}{16}$ |

SQUARE SPLAYED.

ORIEL.

| No. of Lights Wide | PROJ. | | WIDTH | | WITH SINGLE SIDE LIGHTS | | | |
|--------------------|-------|-----------------|-------|------------------|-------------------------|------------------|-------|------------------|
| | ft. | in. | ft. | in. | PROJECTION | | WIDTH | |
| SIX LIGHTS .. | 3 | 2 $\frac{3}{4}$ | 6 | 2 $\frac{1}{2}$ | ft. | in. | ft. | in. |
| | 3 | 3 $\frac{3}{4}$ | 6 | 3 $\frac{1}{2}$ | 1 | 4 $\frac{9}{16}$ | 2 | 9 $\frac{1}{8}$ |
| | 3 | 4 $\frac{3}{4}$ | 6 | 4 $\frac{1}{2}$ | 1 | 5 $\frac{3}{8}$ | 2 | 10 $\frac{3}{4}$ |
| SEVEN LIGHTS .. | 3 | 2 $\frac{3}{4}$ | 7 | 9 $\frac{3}{8}$ | 1 | 6 $\frac{3}{16}$ | 3 | 0 $\frac{3}{8}$ |
| | 3 | 3 $\frac{3}{4}$ | 7 | 10 $\frac{3}{8}$ | WITH DOUBLE SIDE LIGHTS | | | |
| | 3 | 4 $\frac{3}{4}$ | 7 | 11 $\frac{3}{8}$ | PROJECTION | | WIDTH | |
| EIGHT LIGHTS .. | 3 | 2 $\frac{3}{4}$ | 9 | 5 $\frac{3}{4}$ | ft. | in. | ft. | in. |
| | 3 | 3 $\frac{3}{4}$ | 9 | 6 $\frac{3}{4}$ | 2 | 6 $\frac{1}{4}$ | 5 | 0 $\frac{1}{2}$ |
| | 3 | 4 $\frac{3}{4}$ | 9 | 7 $\frac{3}{4}$ | 2 | 7 | 5 | 2 |
| | | | | | 2 | 7 $\frac{3}{4}$ | 5 | 3 $\frac{1}{2}$ |

ALL SIZES ARE FOR BAYS WITH
WOOD CORNER POSTS.

3" x 2" WOOD SURROUNDS SHOWN GREEN
3 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " " " " BLACK
4" x 3" " " " RED

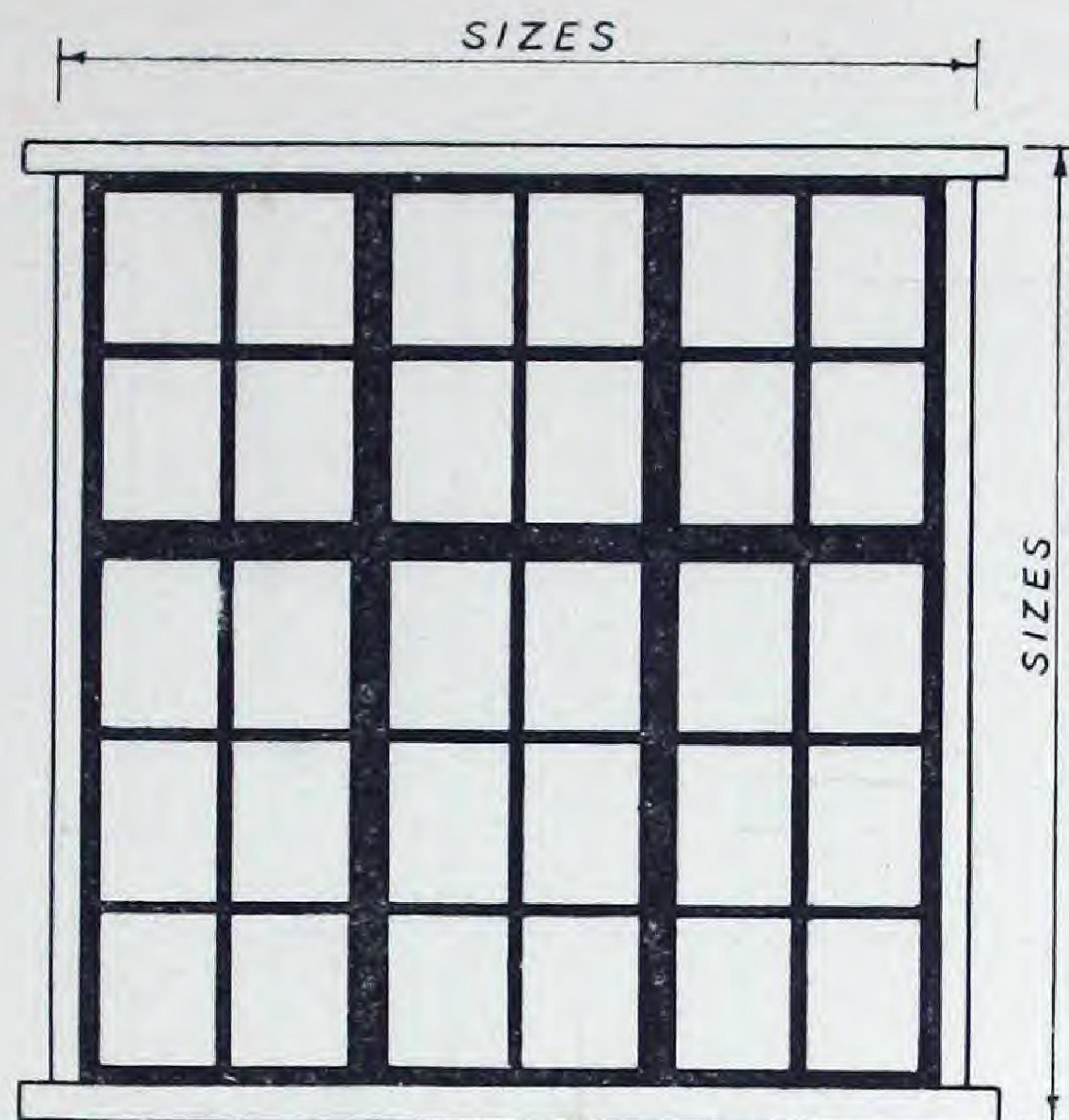
OVERALL SIZES



TABLE OF OVERALL SIZES.

| SURROUNDS OUT OF 3½" × 2½" | | | | | | SURROUNDS OUT OF 4" × 3" | | | | | |
|----------------------------|------------------|-------------------|------------------|------------------|------------------|--------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|
| TYPES | 11-in. Types | One Light | Two Lights | Three Lights | Four Lights | TYPES | 11-in. Types | One Light | Two Lights | Three Lights | Four Lights |
| G | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. | G | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. |
| | 1 3½ H 1 2½ W | 1 3½ H 1 11½ W | 1 3½ H 3 6½ W | 1 3½ H 5 1½ W | 1 3½ H 6 9½ W | | 1 3½ H 1 3½ W | 1 3½ H 2 0½ W | 1 3½ H 3 7½ W | 1 3½ H 5 2½ W | 1 3½ H 6 10½ W |
| Q | 1 10 H 1 2½ W | 1 10 H 1 11½ W | 1 10 H 3 6½ W | 1 10 H 5 1½ W | 1 10 H 6 9½ W | Q | 1 10½ H 1 3½ W | 1 10½ H 2 0½ W | 1 10½ H 3 7½ W | 1 10½ H 5 2½ W | 1 10½ H 6 10½ W |
| | 2 4½ H 1 2½ W | 2 4½ H 1 11½ W | 2 4½ H 3 6½ W | 2 4½ H 5 1½ W | 2 4½ H 6 9½ W | | 2 5½ H 1 3½ W | 2 5½ H 2 0½ W | 2 5½ H 3 7½ W | 2 5½ H 5 2½ W | 2 5½ H 6 10½ W |
| E | 3 4½ H 1 2½ W | 3 4½ H 1 11½ W | 3 4½ H 3 6½ W | 3 4½ H 5 1½ W | 3 4½ H 6 9½ W | E | 3 5 H 1 3½ W | 3 5 H 2 0½ W | 3 5 H 3 7½ W | 3 5 H 5 2½ W | 3 5 H 6 10½ W |
| | 4 4 H 1 2½ W | 4 4 H 1 11½ W | 4 4 H 3 6½ W | 4 4 H 5 1½ W | 4 4 H 6 9½ W | | 4 4½ H 1 3½ W | 4 4½ H 2 0½ W | 4 4½ H 3 7½ W | 4 4½ H 5 2½ W | 4 4½ H 6 10½ W |
| C AND AA | 4 4 H 1 2½ W | 4 4 H 1 11½ W | 4 4 H 3 6½ W | 4 4 H 5 1½ W | 4 4 H 6 9½ W | C AND AA | 4 4½ H 1 3½ W | 4 4½ H 2 0½ W | 4 4½ H 3 7½ W | 4 4½ H 5 2½ W | 4 4½ H 6 10½ W |
| | 4 4 H 1 2½ W | 4 4 H 1 11½ W | 4 4 H 3 6½ W | 4 4 H 5 1½ W | 4 4 H 6 9½ W | | 4 4½ H 1 3½ W | 4 4½ H 2 0½ W | 4 4½ H 3 7½ W | 4 4½ H 5 2½ W | 4 4½ H 6 10½ W |
| D AND BB | 4 4 H 1 2½ W | 4 4 H 1 11½ W | 4 4 H 3 6½ W | 4 4 H 5 1½ W | 4 4 H 6 9½ W | D AND BB | 4 4½ H 1 3½ W | 4 4½ H 2 0½ W | 4 4½ H 3 7½ W | 4 4½ H 5 2½ W | 4 4½ H 6 10½ W |
| | 4 4 H 1 2½ W | 4 4 H 1 11½ W | 4 4 H 3 6½ W | 4 4 H 5 1½ W | 4 4 H 6 9½ W | | 4 4½ H 1 3½ W | 4 4½ H 2 0½ W | 4 4½ H 3 7½ W | 4 4½ H 5 2½ W | 4 4½ H 6 10½ W |

OVERALL SIZES



TYPICAL ELEVATION TYPE CE

3 LIGHTS

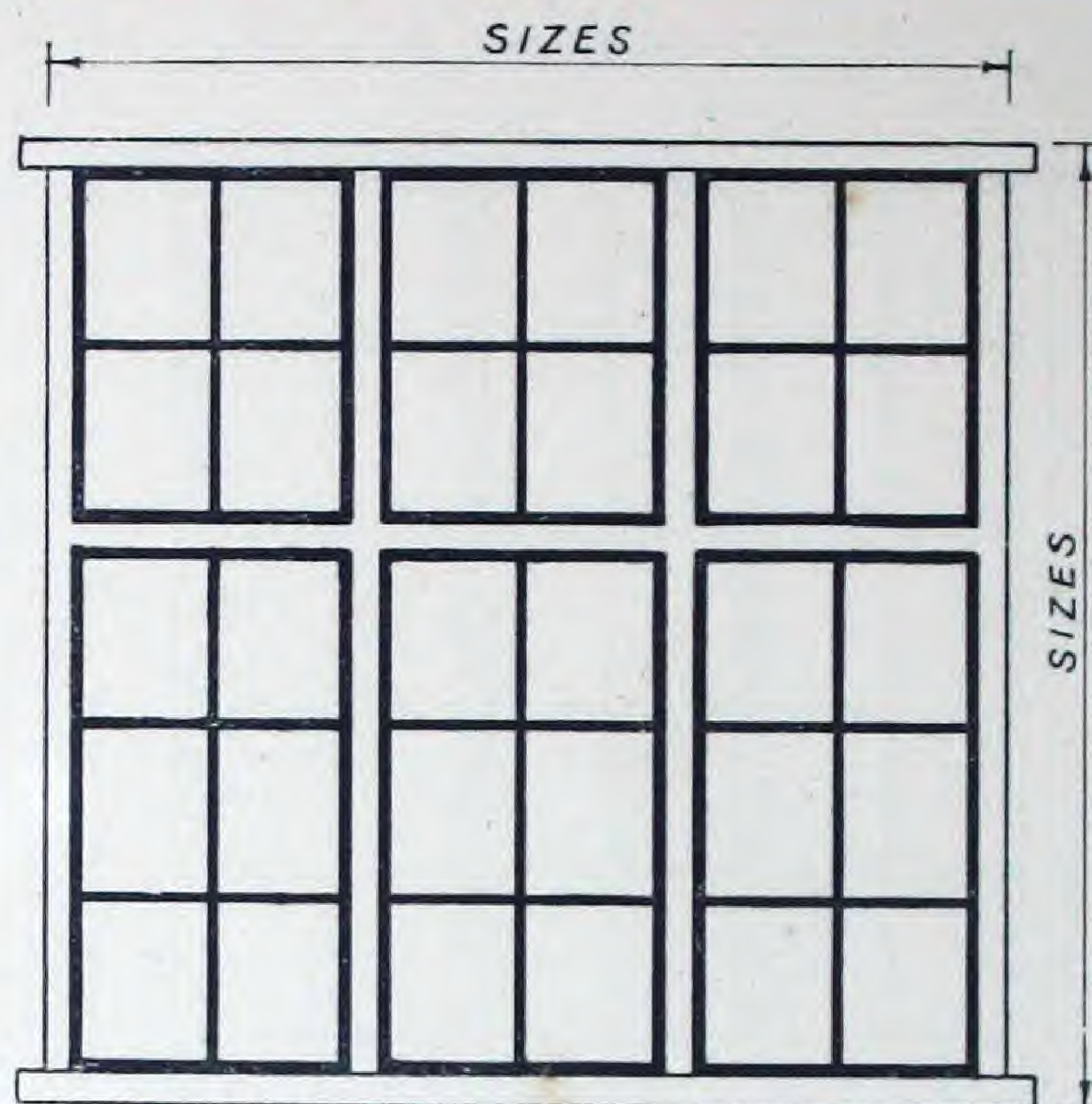
STEEL MULLIONS AND TRANSOMES

SIZES GIVEN BELOW ARE OVERALL WOOD SURROUNDS

TABLE OF OVERALL SIZES

| SURROUNDS OUT OF 3½" × 2½" | | | | | | SURROUNDS OUT OF 4" × 3" | | | | | |
|----------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| TYPE | 11" Types | One Light | Two Lights | Three Lights | Four Lights | TYPE | 11" Types | One Light | Two Lights | Three Lights | Four Lights |
| | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. | | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. |
| EG | 3 4 1/16 H 1 2 1/2 W | 3 4 5/16 H 1 11 1/2 W | 3 4 5/16 H 3 6 5/8 W | 3 4 5/16 H 5 1 3/4 W | 3 4 5/16 H 6 9 7/8 W | EG | 3 4 13/16 H 1 3 1/2 W | 3 4 13/16 H 2 0 1/2 W | 3 4 13/16 H 3 7 5/8 W | 3 4 13/16 H 5 2 3/4 W | 3 4 13/16 H 6 10 7/8 W |
| CG | 4 4 H 1 2 1/2 W | 4 4 H 1 11 1/2 W | 4 4 H 3 6 5/8 W | 4 4 H 5 1 3/4 W | 4 4 H 6 9 7/8 W | CG | 4 4 1/2 H 1 3 1/2 W | 4 4 1/2 H 2 0 1/2 W | 4 4 1/2 H 3 7 5/8 W | 4 4 1/2 H 5 2 3/4 W | 4 4 1/2 H 6 10 7/8 W |
| CQ | 4 10 5/8 H 1 2 1/2 W | 4 10 5/8 H 1 11 1/2 W | 4 10 5/8 H 3 6 5/8 W | 4 10 5/8 H 5 1 3/4 W | 4 10 5/8 H 6 9 7/8 W | CQ | 4 11 1/8 H 1 3 1/2 W | 4 11 1/8 H 2 0 1/2 W | 4 11 1/8 H 3 7 5/8 W | 4 11 1/8 H 5 2 3/4 W | 4 11 1/8 H 6 10 7/8 W |
| CE | 5 5 7/16 H 1 2 1/2 W | 5 5 7/16 H 1 11 1/2 W | 5 5 7/16 H 3 6 5/8 W | 5 5 7/16 H 5 1 3/4 W | 5 5 7/16 H 6 9 7/8 W | CE | 5 5 15/16 H 1 3 1/2 W | 5 5 15/16 H 2 0 1/2 W | 5 5 15/16 H 3 7 5/8 W | 5 5 15/16 H 5 2 3/4 W | 5 5 15/16 H 6 10 7/8 W |
| DG | 5 3 1/2 H 1 2 1/2 W | 5 3 1/2 H 1 11 1/2 W | 5 3 1/2 H 3 6 5/8 W | 5 3 1/2 H 5 1 3/4 W | 5 3 1/2 H 6 9 7/8 W | DG | 5 4 H 1 3 1/2 W | 5 4 H 2 0 1/2 W | 5 4 H 3 7 5/8 W | 5 4 H 5 2 3/4 W | 5 4 H 6 10 7/8 W |
| DQ | 5 10 1/8 H 1 2 1/2 W | 5 10 1/8 H 1 11 1/2 W | 5 10 1/8 H 3 6 5/8 W | 5 10 1/8 H 5 1 3/4 W | 5 10 1/8 H 6 9 7/8 W | DQ | 5 10 5/8 H 1 3 1/2 W | 5 10 5/8 H 2 0 1/2 W | 5 10 5/8 H 3 7 5/8 W | 5 10 5/8 H 5 2 3/4 W | 5 10 5/8 H 6 10 7/8 W |
| DE | 6 4 15/16 H 1 2 1/2 W | 6 4 15/16 H 1 11 1/2 W | 6 4 15/16 H 3 6 5/8 W | 6 4 15/16 H 5 1 3/4 W | 6 4 15/16 H 6 9 7/8 W | DE | 6 5 7/16 H 1 3 1/2 W | 6 5 7/16 H 2 0 1/2 W | 6 5 7/16 H 3 7 5/8 W | 6 5 7/16 H 5 2 3/4 W | 6 5 7/16 H 6 10 7/8 W |

OVERALL SIZES



TYPICAL ELEVATION TYPE CE

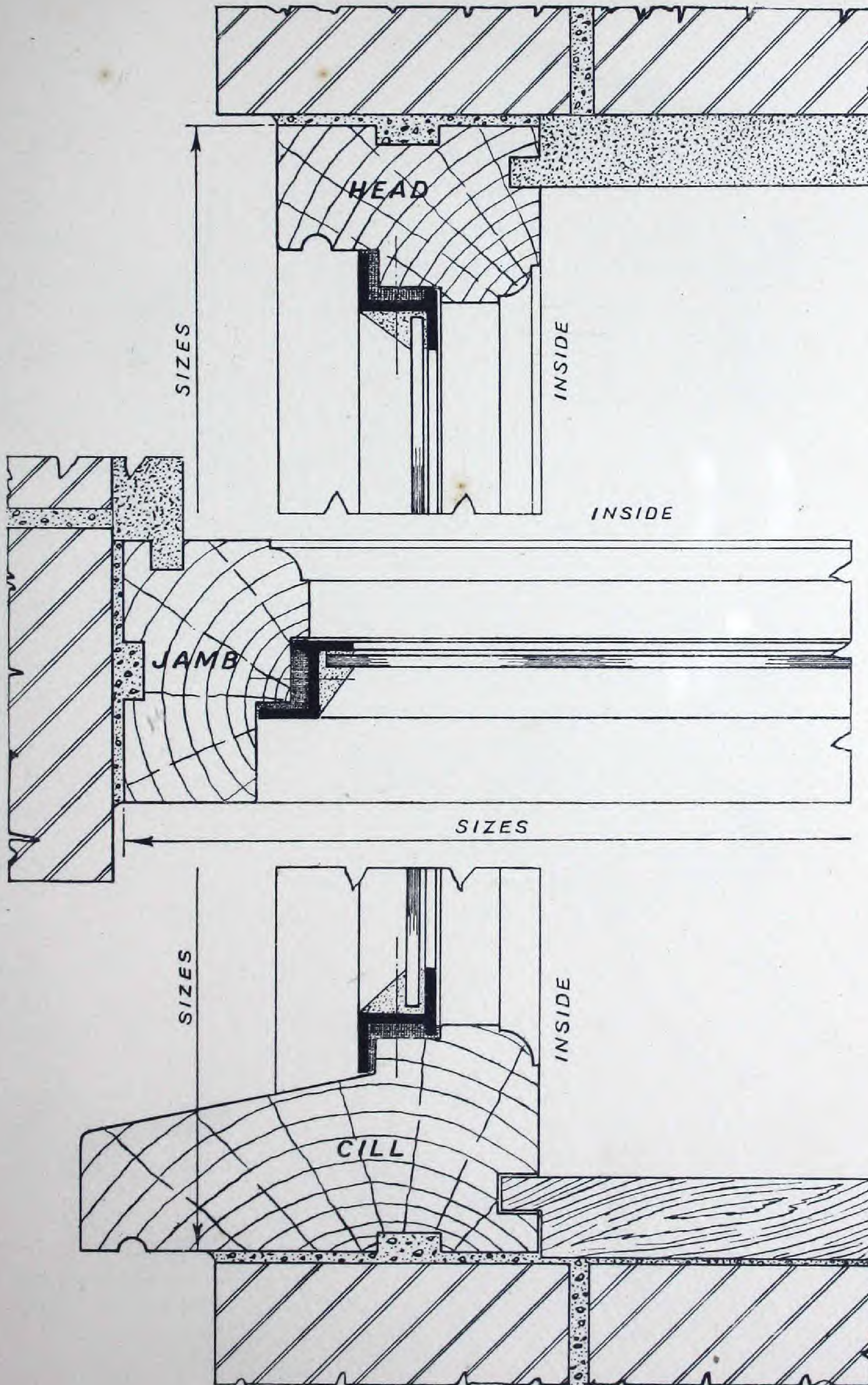
3 LIGHTS

WOOD MULLIONS AND TRANSOMES

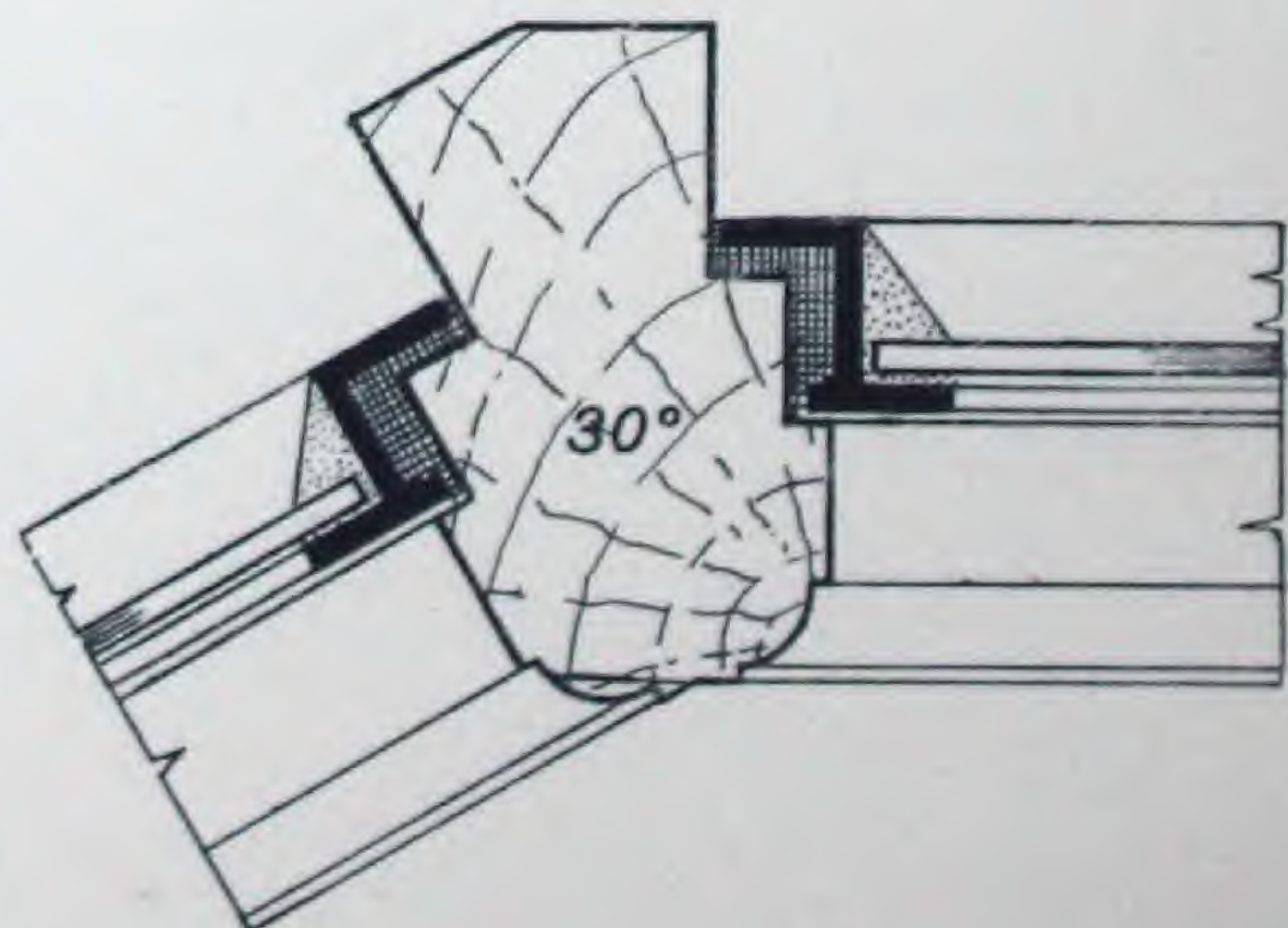
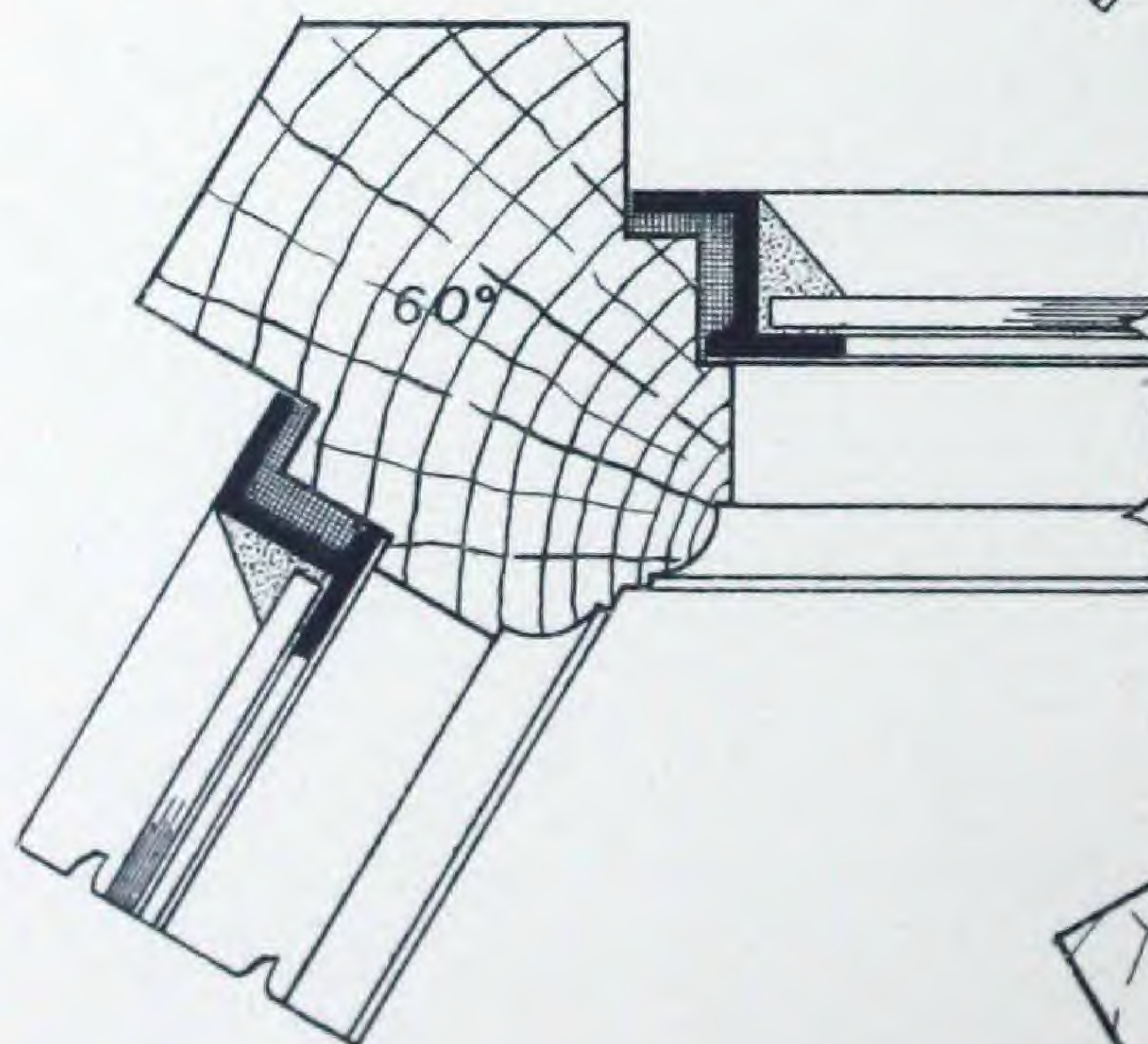
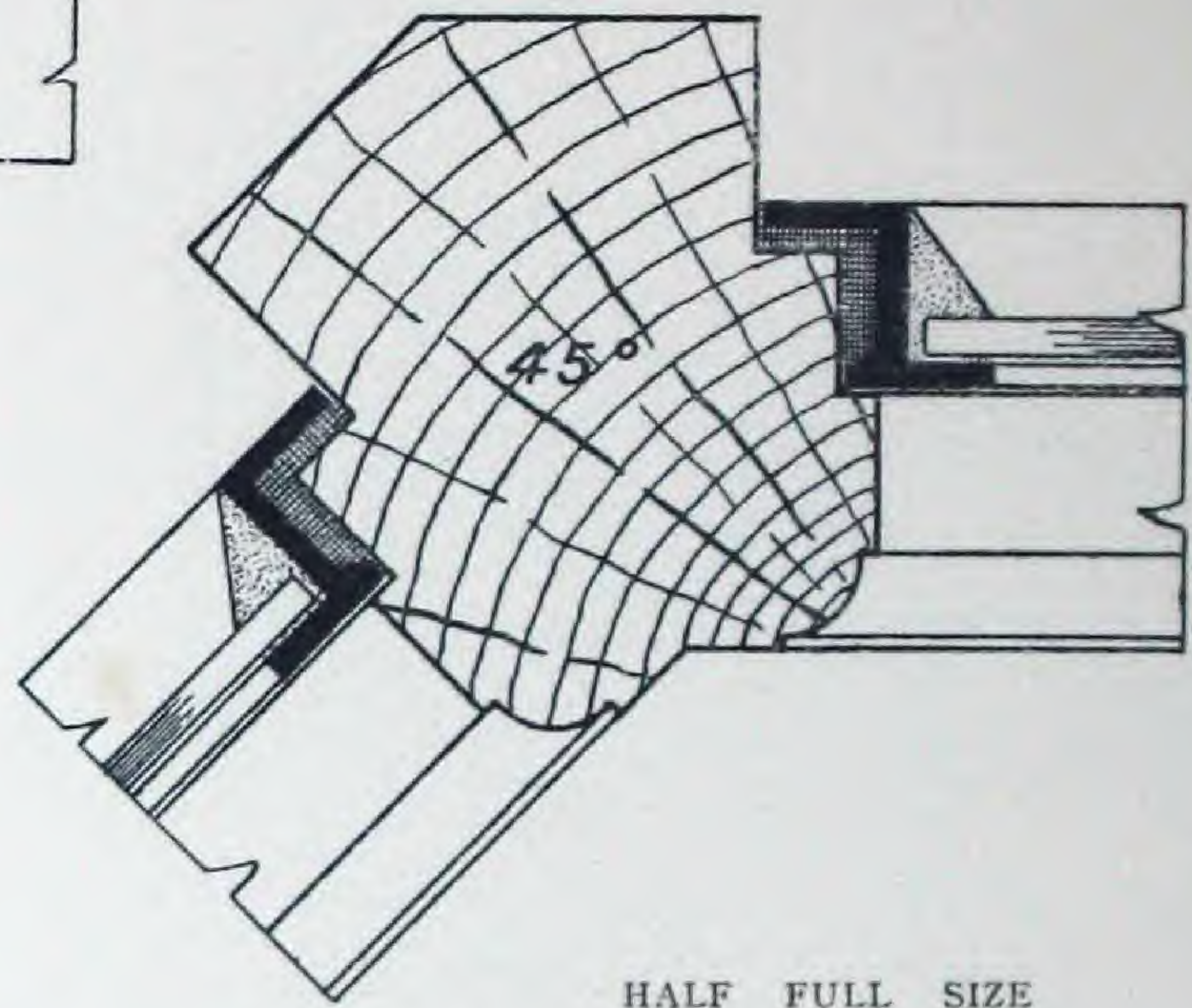
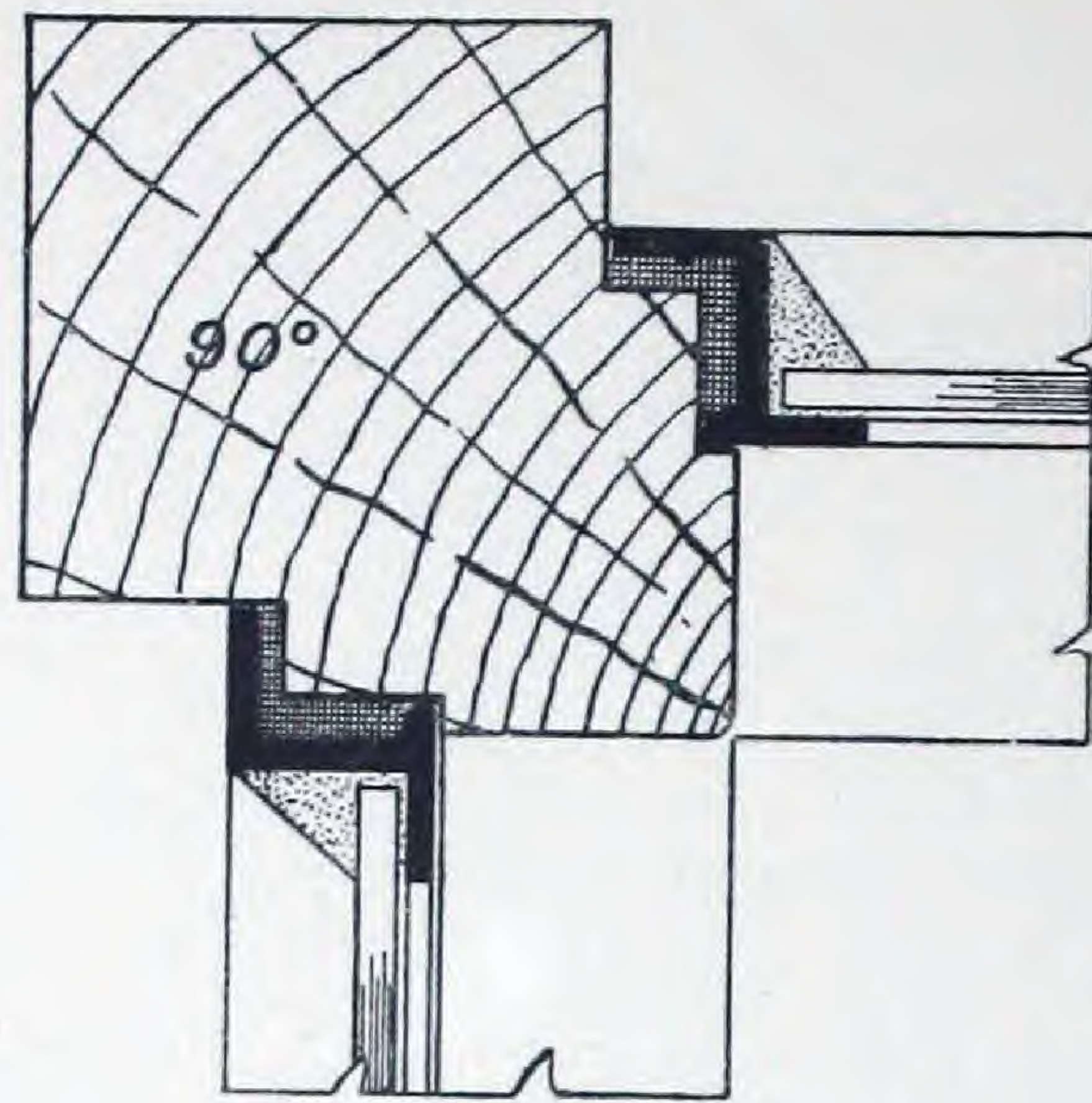
SIZES GIVEN BELOW ARE OVERALL WOOD SURROUNDS

TABLE OF OVERALL SIZES

| SURROUNDS OUT OF 3½" x 2½" | | | | | | SURROUNDS OUT OF 4' x 3' | | | | | |
|----------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|
| TYPE | 11" Types | One Light | Two Lights | Three Lights | Four Lights | TYPE | 11" Types | One Light | Two Lights | Three Lights | Four Lights |
| | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. | | ft. in. | ft. in. | ft. in. | ft. in. | ft. in. |
| EG | 3 5 16 H 1 2 1/2 W | 3 5 16 H 1 11 1/2 W | 3 5 16 H 3 8 1/2 W | 3 5 16 H 5 5 1/2 W | 3 5 16 H 7 2 7/8 W | EG | 3 6 1/8 H 1 3 1/2 W | 3 6 1/8 H 2 0 1/2 W | 3 6 1/8 H 3 10 1/2 W | 3 6 1/8 H 5 7 1/2 W | 3 6 1/8 H 7 5 1/2 W |
| CG | 4 5 H 1 2 1/2 W | 4 5 H 1 11 1/2 W | 4 5 H 3 8 1/2 W | 4 5 H 5 5 1/2 W | 4 5 H 7 2 7/8 W | CG | 4 6 H 1 3 1/2 W | 4 6 H 2 0 1/2 W | 4 6 H 3 10 1/2 W | 4 6 H 5 7 1/2 W | 4 6 H 7 5 1/2 W |
| CQ | 4 11 1/2 H 1 2 1/2 W | 4 11 1/2 H 1 11 1/2 W | 4 11 1/2 H 3 8 1/2 W | 4 11 1/2 H 5 5 1/2 W | 4 11 1/2 H 7 2 7/8 W | CQ | 5 0 1/2 H 1 3 1/2 W | 5 0 1/2 H 2 0 1/2 W | 5 0 1/2 H 3 10 1/2 W | 5 0 1/2 H 5 7 1/2 W | 5 0 1/2 H 7 5 1/2 W |
| CE | 5 6 7/16 H 1 2 1/2 W | 5 6 7/16 H 1 11 1/2 W | 5 6 7/16 H 3 8 1/2 W | 5 6 7/16 H 5 5 1/2 W | 5 6 7/16 H 7 2 7/8 W | CE | 5 7 1/8 H 1 3 1/2 W | 5 7 1/8 H 2 0 1/2 W | 5 7 1/8 H 3 10 1/2 W | 5 7 1/8 H 5 7 1/2 W | 5 7 1/8 H 7 5 1/2 W |
| DG | 5 4 1/2 H 1 2 1/2 W | 5 4 1/2 H 1 11 1/2 W | 5 4 1/2 H 3 8 1/2 W | 5 4 1/2 H 5 5 1/2 W | 5 4 1/2 H 7 2 7/8 W | DG | 5 5 1/2 H 1 3 1/2 W | 5 5 1/2 H 2 0 1/2 W | 5 5 1/2 H 3 10 1/2 W | 5 5 1/2 H 5 7 1/2 W | 5 5 1/2 H 7 5 1/2 W |
| DQ | 5 11 1/2 H 1 2 1/2 W | 5 11 1/2 H 1 11 1/2 W | 5 11 1/2 H 3 8 1/2 W | 5 11 1/2 H 5 5 1/2 W | 5 11 1/2 H 7 2 7/8 W | DQ | 6 0 1/2 H 1 3 1/2 W | 6 0 1/2 H 2 0 1/2 W | 6 0 1/2 H 3 10 1/2 W | 6 0 1/2 H 5 7 1/2 W | 6 0 1/2 H 7 5 1/2 W |
| DE | 6 5 11/16 H 1 2 1/2 W | 6 5 11/16 H 1 11 1/2 W | 6 5 11/16 H 3 8 1/2 W | 6 5 11/16 H 5 5 1/2 W | 6 5 11/16 H 7 2 7/8 W | DE | 6 6 1/2 H 1 3 1/2 W | 6 6 1/2 H 2 0 1/2 W | 6 6 1/2 H 3 10 1/2 W | 6 6 1/2 H 5 7 1/2 W | 6 6 1/2 H 7 5 1/2 W |



CORNER
POSTS
TO BAYS



HALF FULL SIZE
DETAILS OF WOOD
CORNER POSTS

Windows are constructed of Rolled Mild Steel sections of first quality, hydraulically straightened, scaled and cleaned free of rust.

Cross Joints of glazing bars are locked to strengthen the points of intersection. Corners are machine mitred and electrically welded. All casements open outwards, unless ordered otherwise, and are hung on heavy steel hinges with 3/8-in. diameter Bronze Pins.

Sidehung Casements are fitted with solid malleable Iron Handle and pegstay. The handle has a 2-point catch, the second point being for night ventilation. Bronze Fittings are supplied at a slight extra cost.

Tophung Casements are fitted with hinges as above and malleable iron pegstay, pin and wrought iron rest. All Fittings have Bronze working parts. Where these windows are built in as the work proceeds, building in lugs are supplied free of charge.

When fixing to wood or stone countersunk fixing holes are provided.

All windows are prepared for curtain Rod and Blind brackets, which are supplied without extra cost. Curtain Rods supplied at slight extra cost.

ARCHITECTS SPECIFICATION.

Steel Windows to be Reliance Standard Cottage Casements manufactured by Messrs. Williams and Williams Ltd., Reliance Works, Chester.

All Casements to be fitted with Reliance 100 Series Standard Iron or Bronze Fittings.*

(*Delete type not required.)

Owing to the rapid advances made in Metal Casement Manufacture we reserve the right to embody any change or improvement into the details shown in this Catalogue.

SPECIFICATION OF WOOD SURROUNDS

The heads and jambs out of $3\frac{1}{2}$ " x $2\frac{1}{2}$ " Deal, Cills from 6" x 3" Oak. All timber is selected seasoned free from knots and shakes.

Heads, Transomes and Cills are throated on the underside as shown on details (see page 35).

Heads and jambs are ploughed on the inside face to receive internal plaster. Cills prepared to receive window board.

Outside face (against wall) is ploughed to receive bedding cement to form effective weather check.

Heads and Cills project beyond jambs to form horns for building in.

Wood surrounds are primed before despatch unless otherwise specified.

Metal Casements are well bedded in mastic cement and screwed to surrounds.

STANDARD TWO POINT
IRON HANDLE



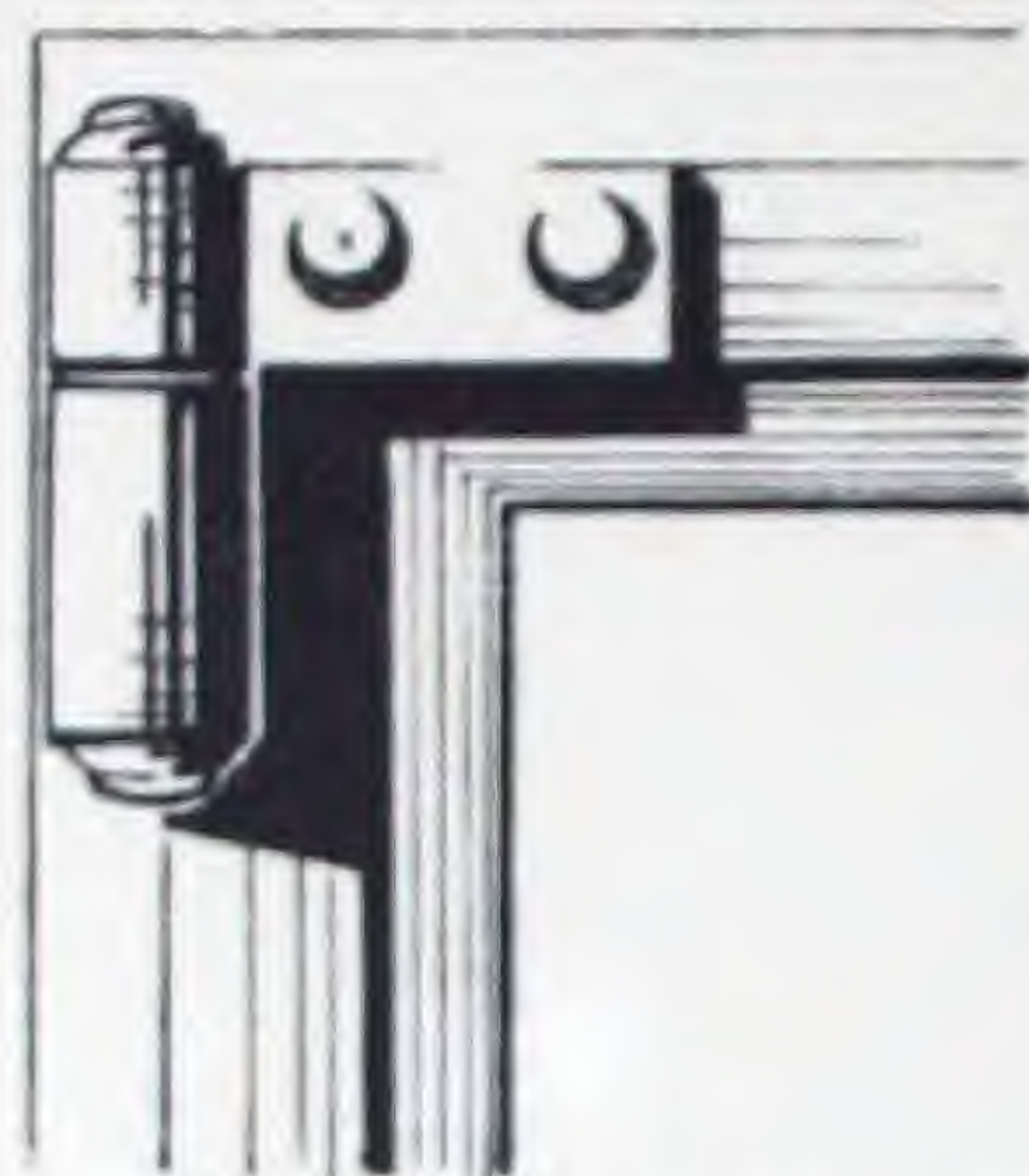
BRONZE
WEDGE-PLATE



NOTE.
HANDLES FIXED
IN POSITION BY
SCREWS

STANDARD TWO POINT BRONZE
HANDLE SUPPLIED AT SLIGHT
EXTRA COST

FITTINGS



STANDARD HINGE AS FITTED
TO SIDE AND TOP HUNG
CASEMENTS
SOLID BRONZE PIN



SPECIAL EXTENDED HINGE TO FACILITATE
CLEANING FROM THE INSIDE



STANDARD IRON PEG STAY, SUPPLIED
IN BRONZE AT SLIGHT EXTRA COST



BRONZE AND IRON SLIDING STAY
SUPPLIED AT SLIGHT EXTRA COST



STANDARD
FRENCH
DOORS



This second section of our Standard Catalogue deals with

RELIANCE STANDARD FRENCH DOORS

These are manufactured in heavy section steel and incorporate several exclusive features.

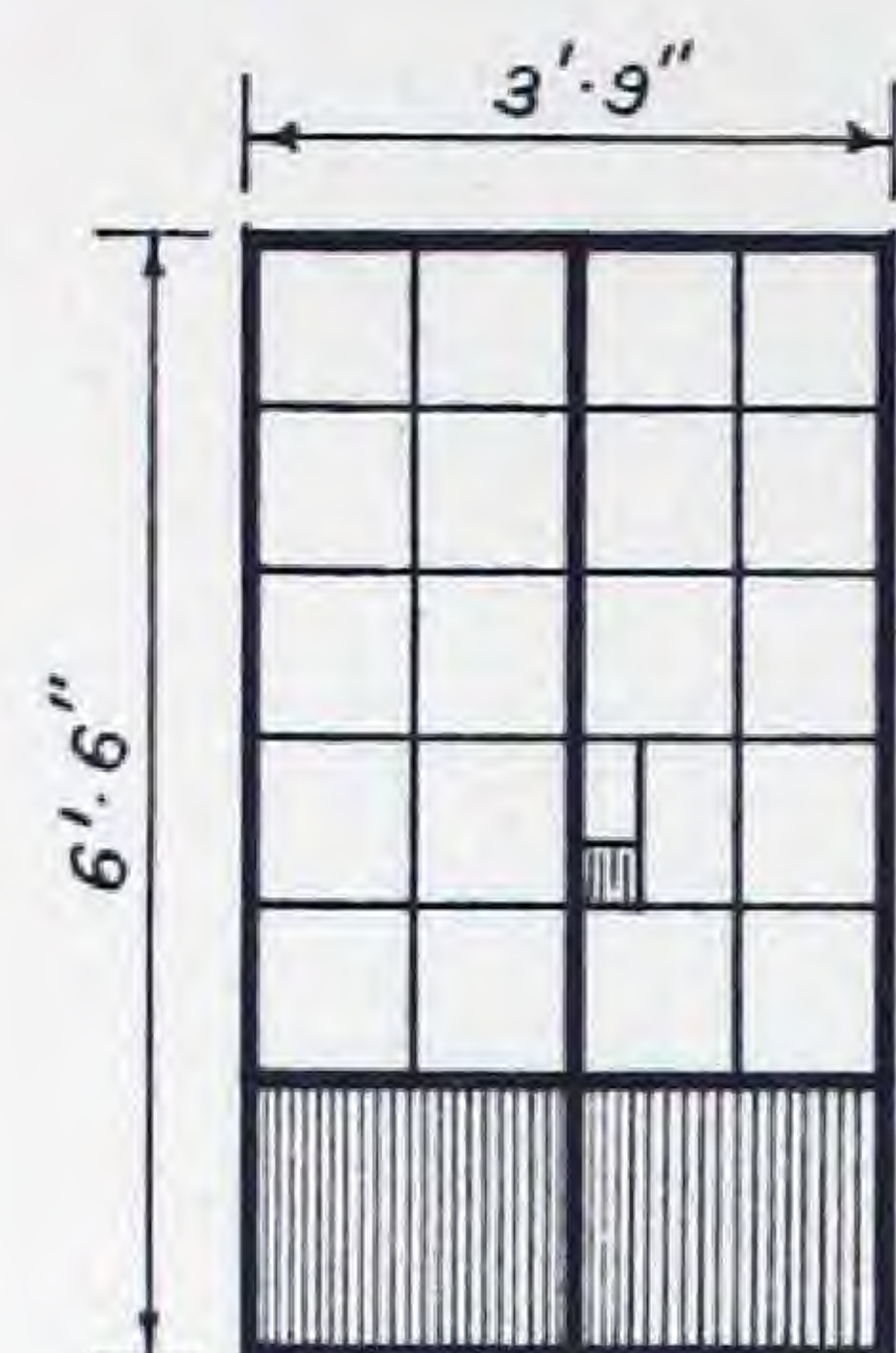
Standard types of Fanlights and Sidelights for use with Reliance Standard French Doors are shown together with the types of Doors on pages 44 and 45.

These Doors are made for use in conjunction with all Reliance Windows. The horizontal glazing Bars are arranged to line up with standard Windows.

A few typical examples of coupling together Standard French Doors and Windows are shown on page 46.

Reliance Standard French Doors are also supplied complete in Wood Surrounds, details of which are given on pages 52 and 53.

TYPES & SIZES



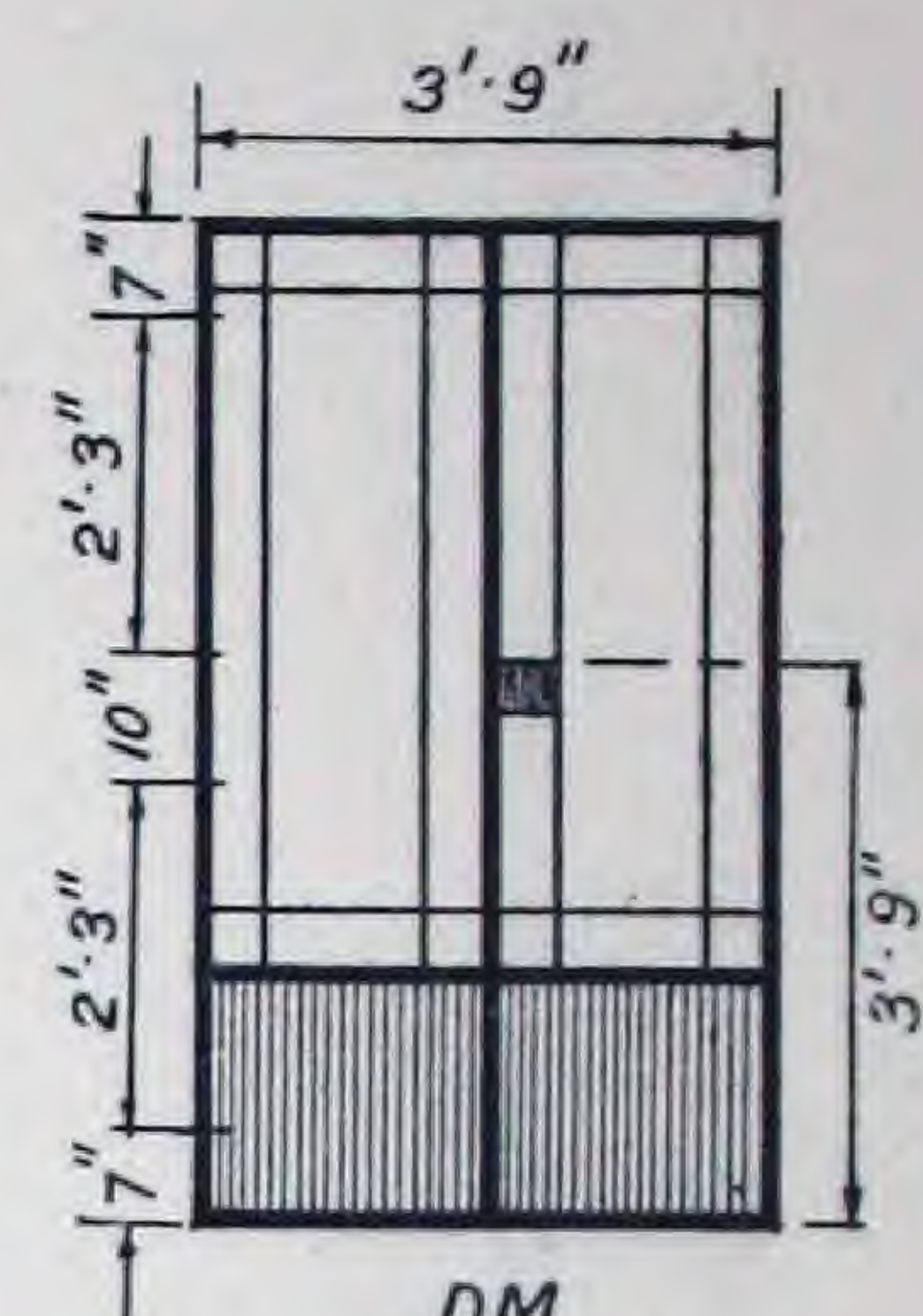
DP



DPS



DMS



DM



DPFI



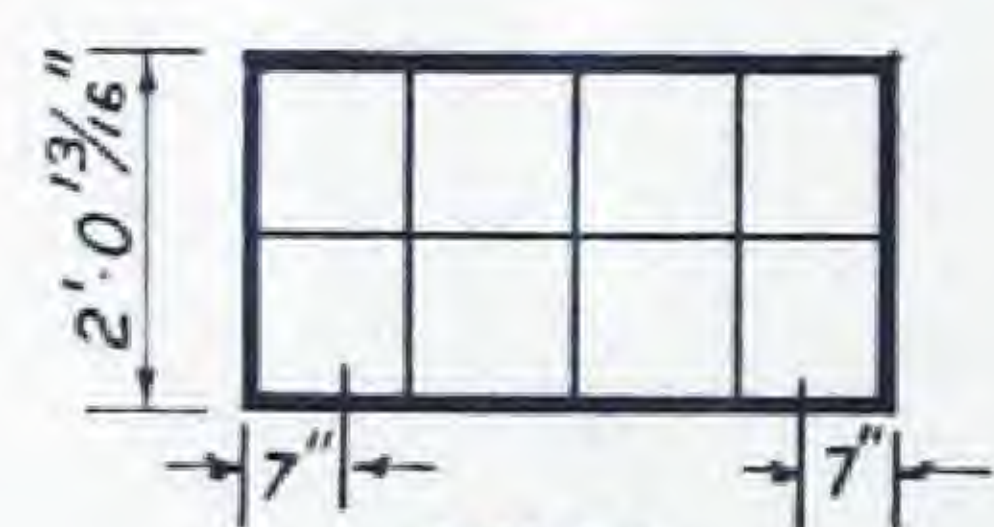
DPSFI



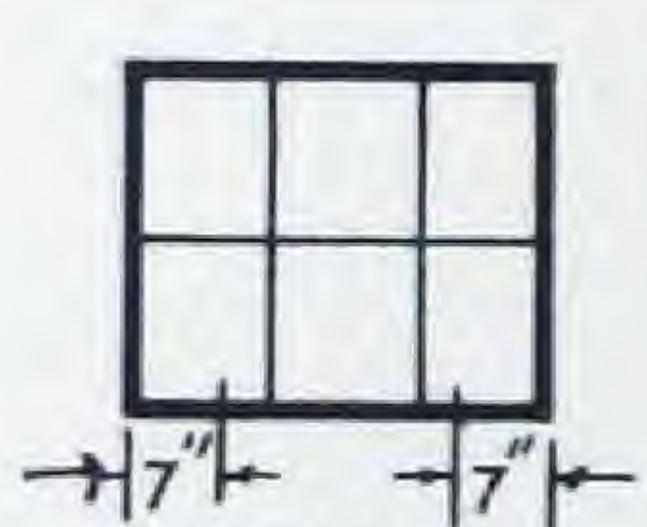
DMSFI



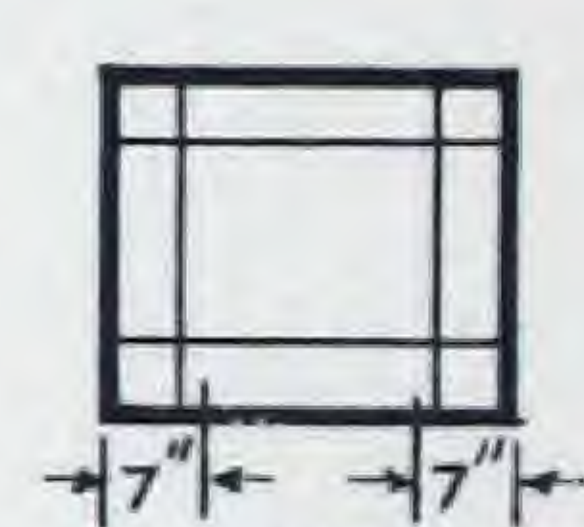
DMFI



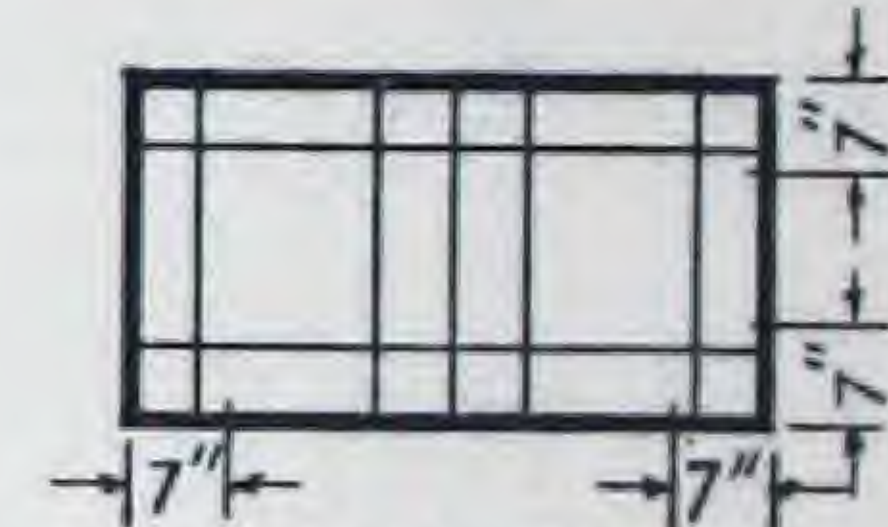
DPF2



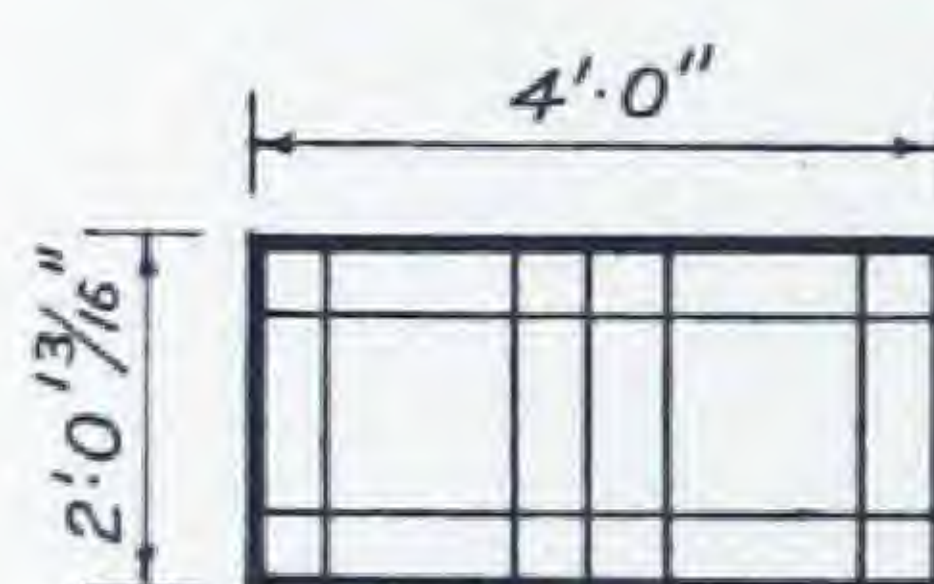
DPSF2



DMSF2



DMF2



DCF2



DCFI

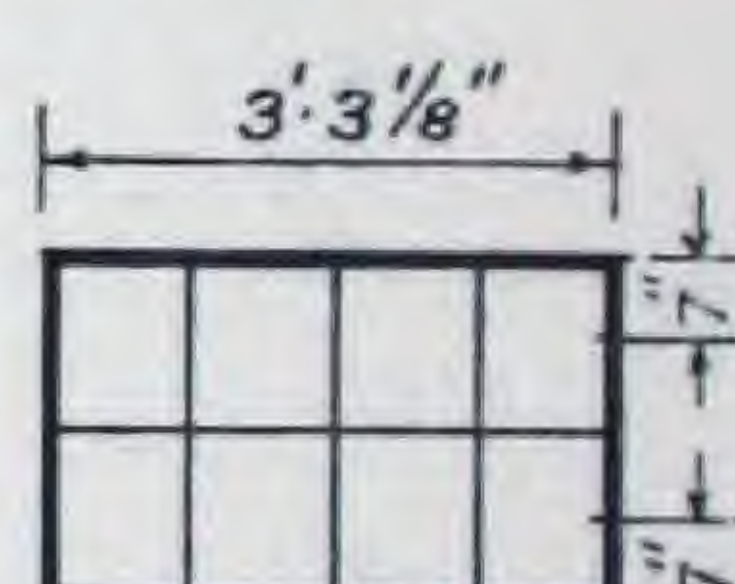
FRENCH DOORS AND FANLIGHTS ARE PREPARED TO BE GLAZED FROM THE OUTSIDE.

FOR OVERALL SIZES OF DOORS WITH FANLIGHTS ADD 3/8" FOR EACH METAL TRANSOME USED.

FRENCH DOORS CAN BE MADE TO OPEN INWARDS.

FANLIGHTS CAN ALSO BE MADE TO OPEN IF REQUIRED.

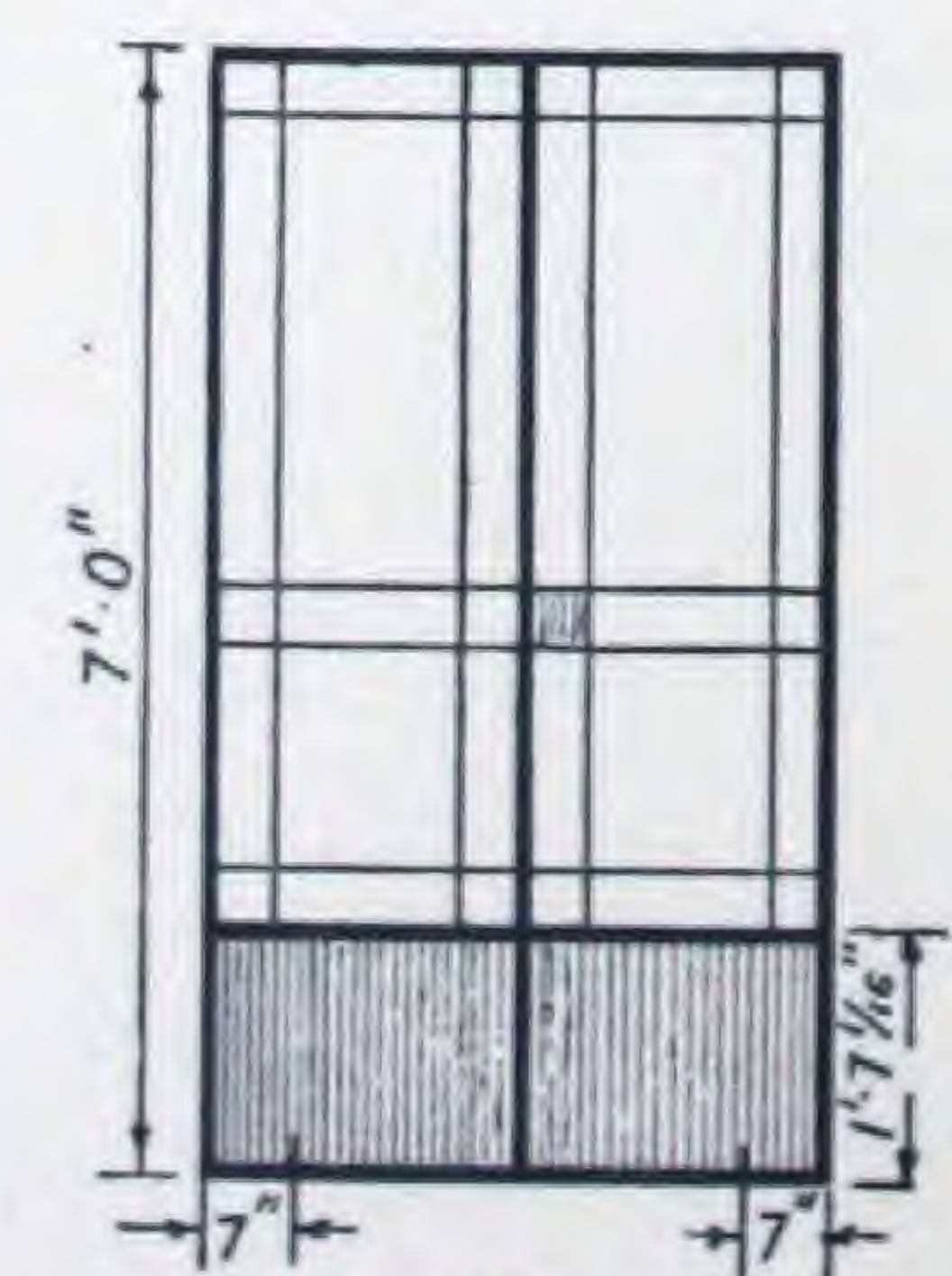
ANY TWO-LIGHT STANDARD COTTAGE CASEMENT CAN BE USED AS FANLIGHT OVER TYPE ADP.



ADPF2



ADPFI



DC



DCS

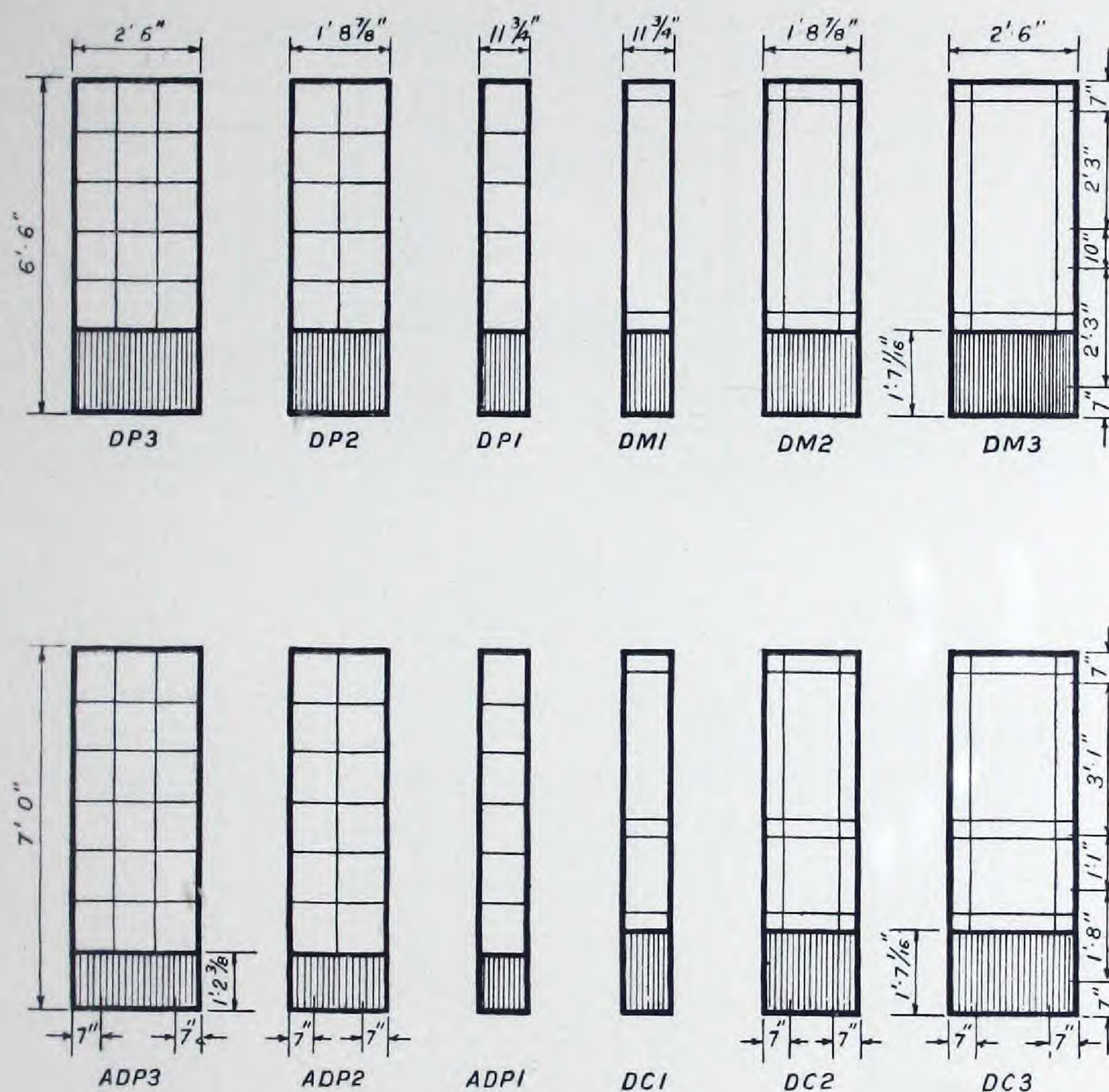


ADPS



ADP

TYPES & SIZES

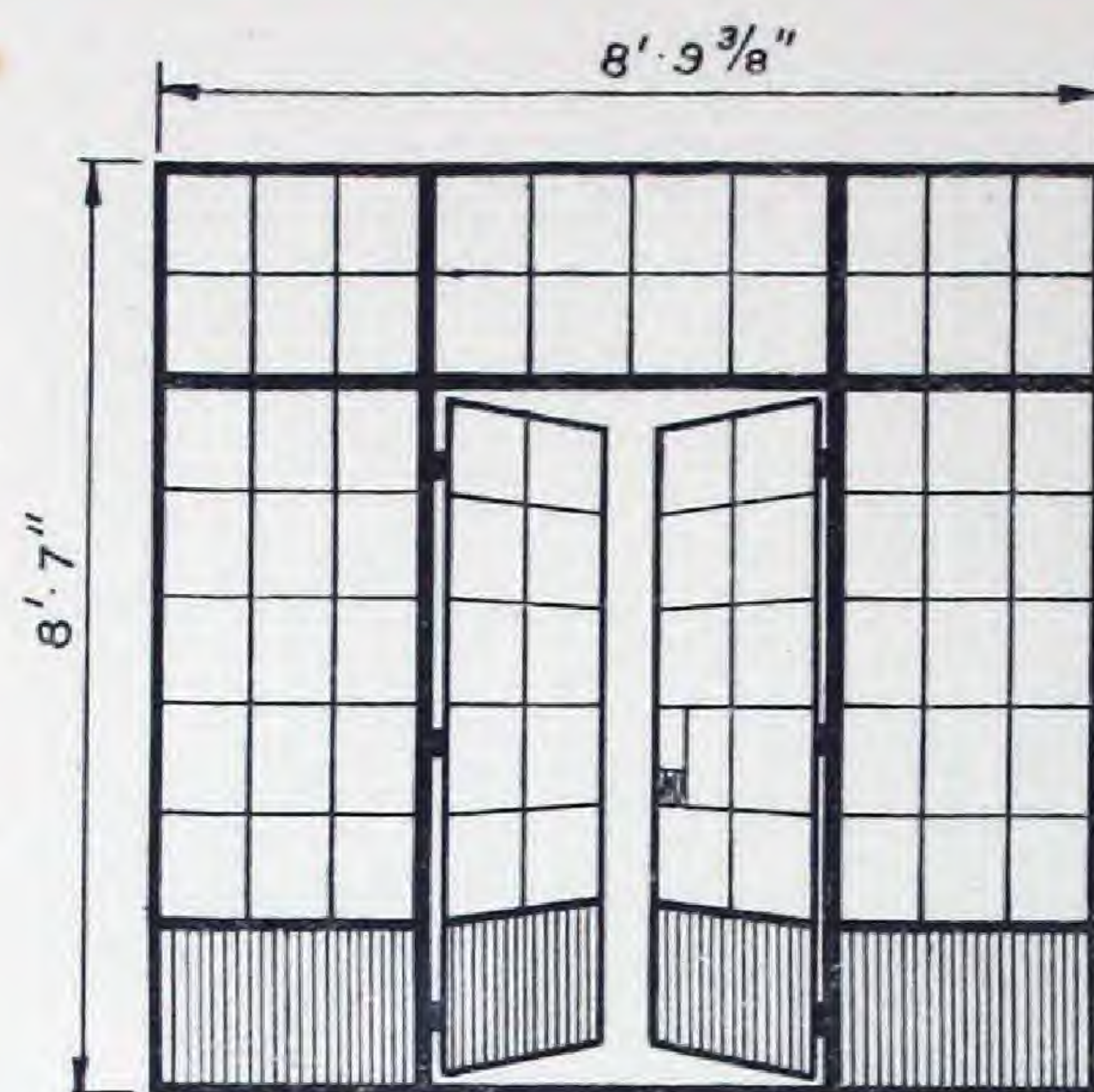


The above range of fast side lights have been designed for use in conjunction with Standard French Doors when a full length side light is required.

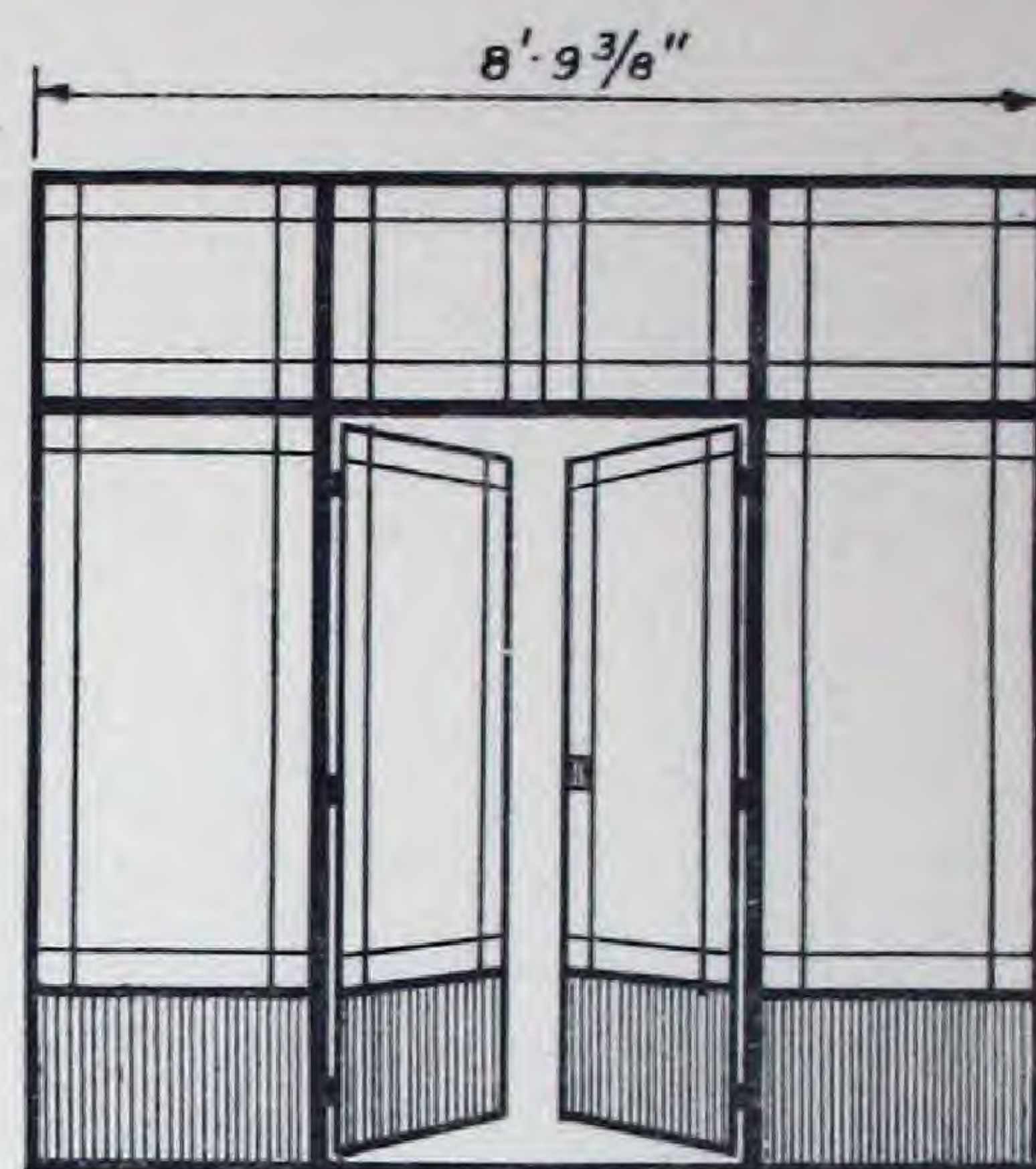
Glazing bars and kicking panels are made to line up in each case.

A few typical examples of coupling Standard French Doors to Standard Fanlights and Side-lights are shown on page 46.

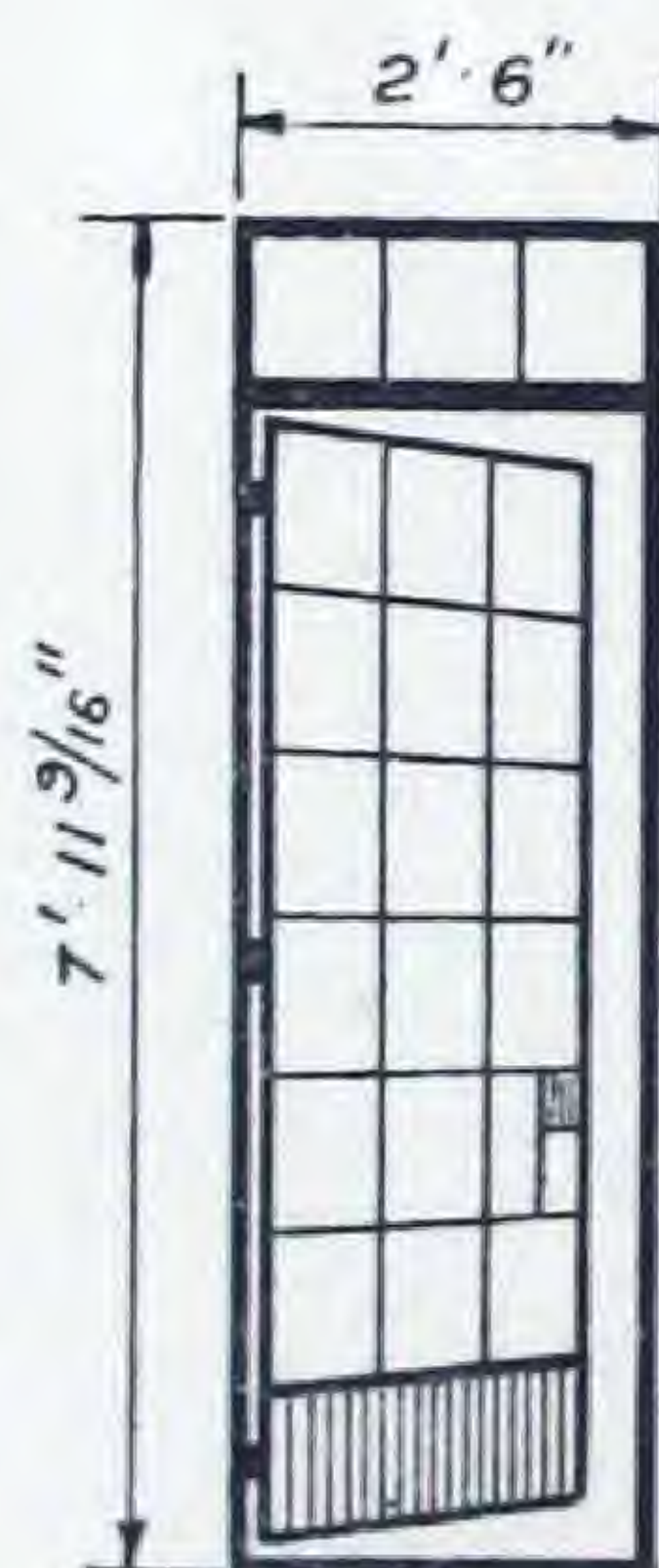
COUPLED TYPES



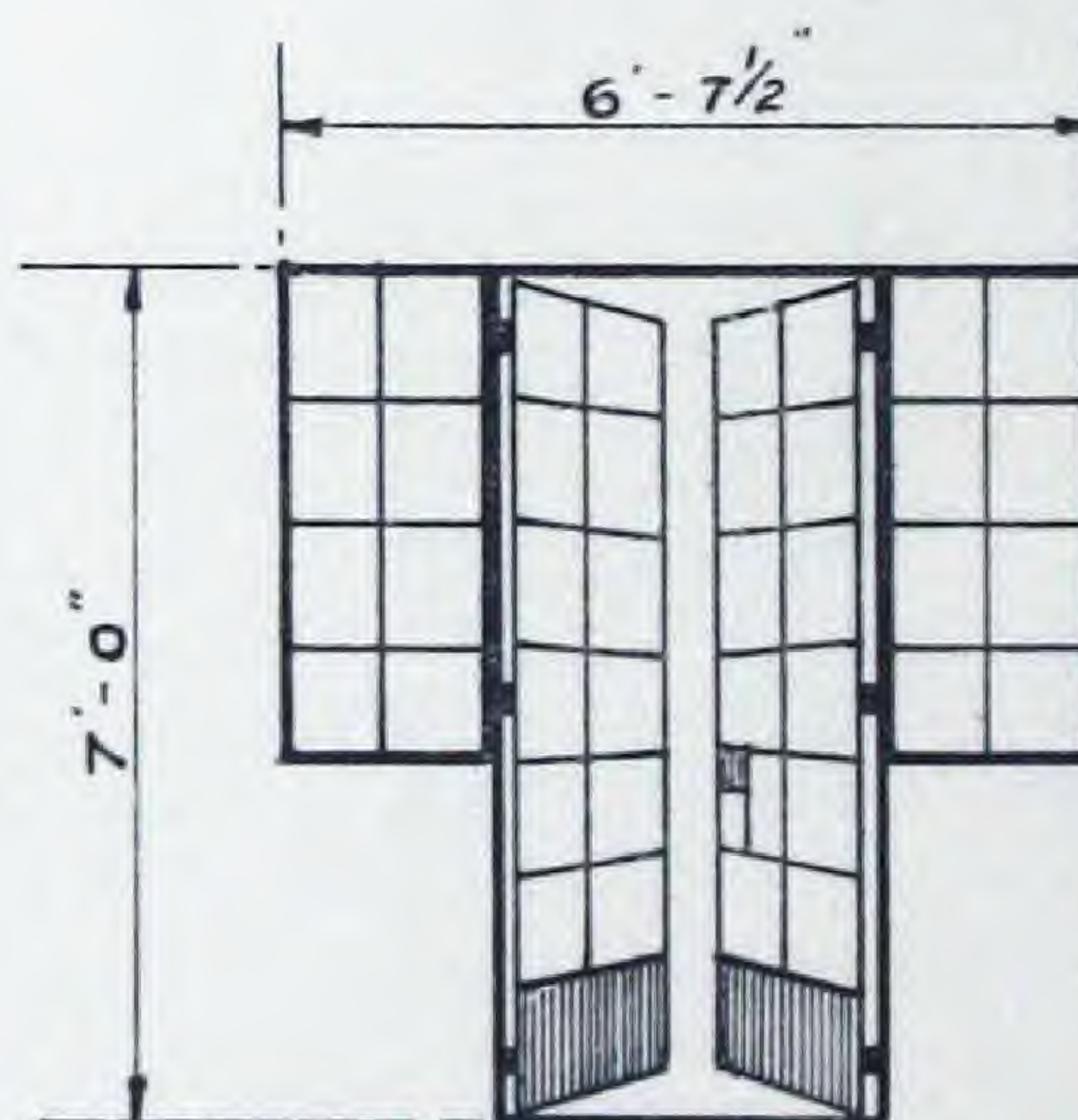
DPSF2 - DPF2 - DPSF2
DP3 - DP - DP3



DMSF2 - DMF2 - DMSF2
DM3 - DM - DM3



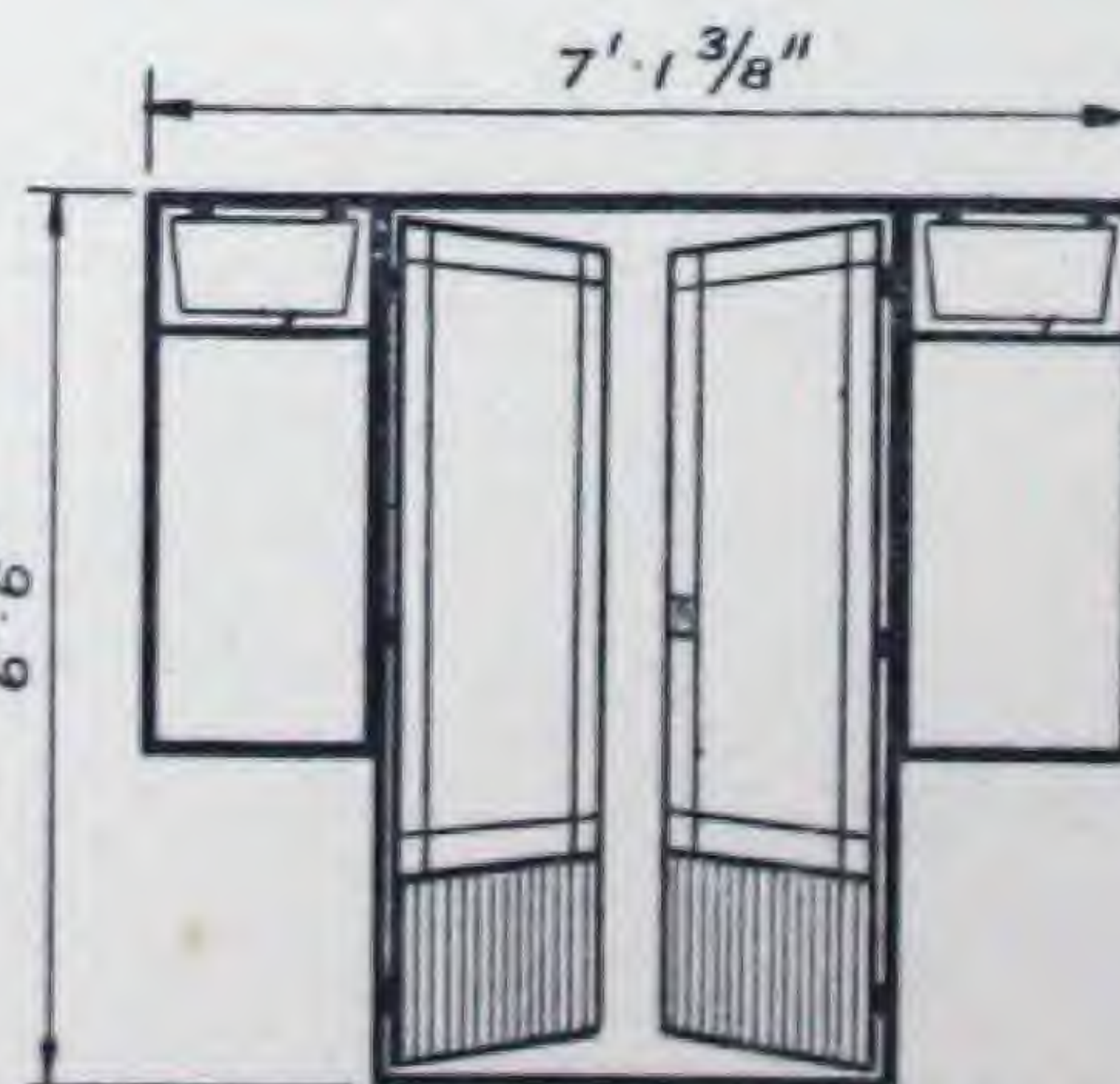
DPSF1
ADPS



D5. ADR D5.



DMSF1
DCS

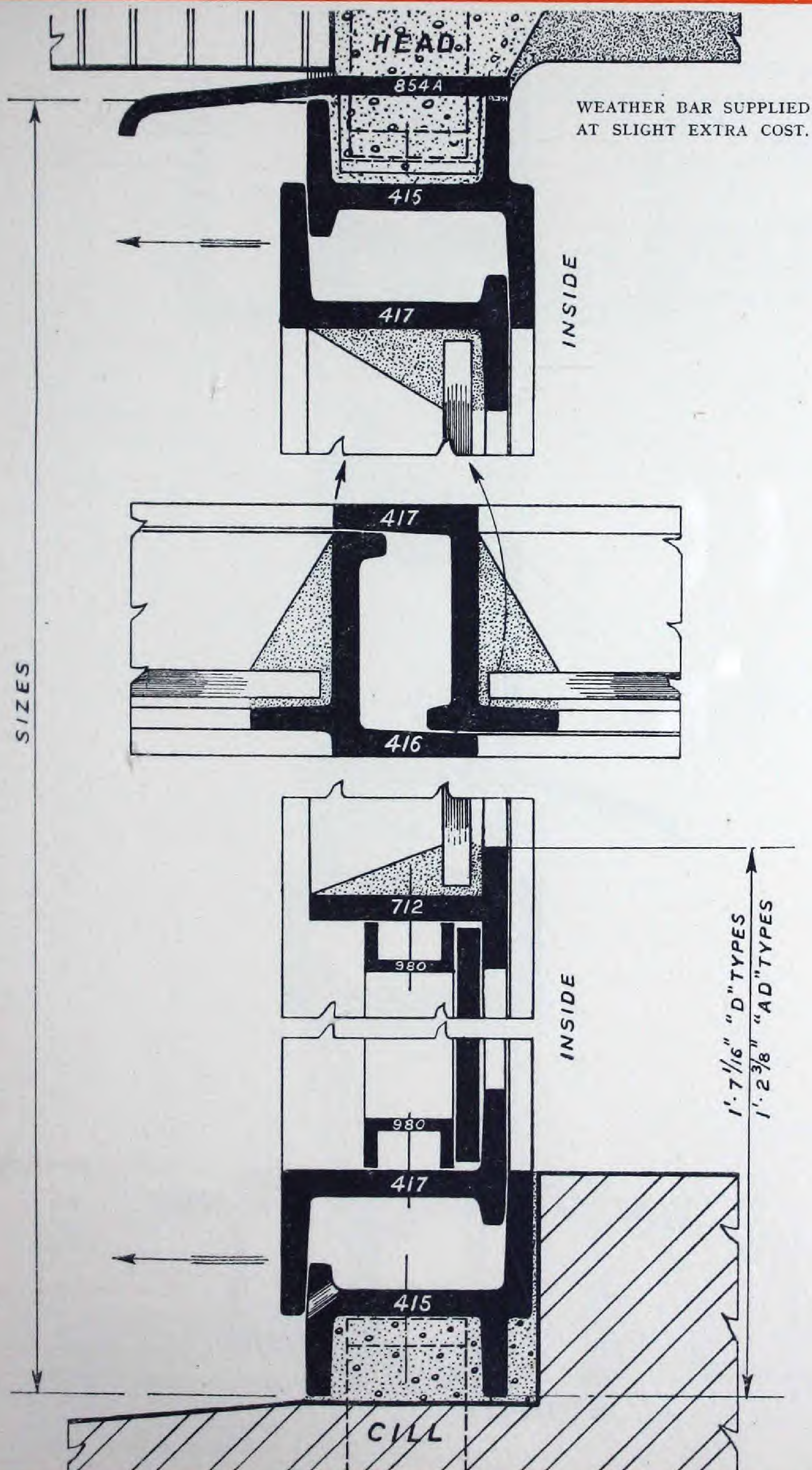


NBB5F - DM - NBB5F

THE ELEVATIONS ON THIS PAGE SHOW ONLY A FEW EXAMPLES OF COUPLING STANDARD FANLIGHTS AND SIDE LIGHTS TO STANDARD FRENCH DOORS.

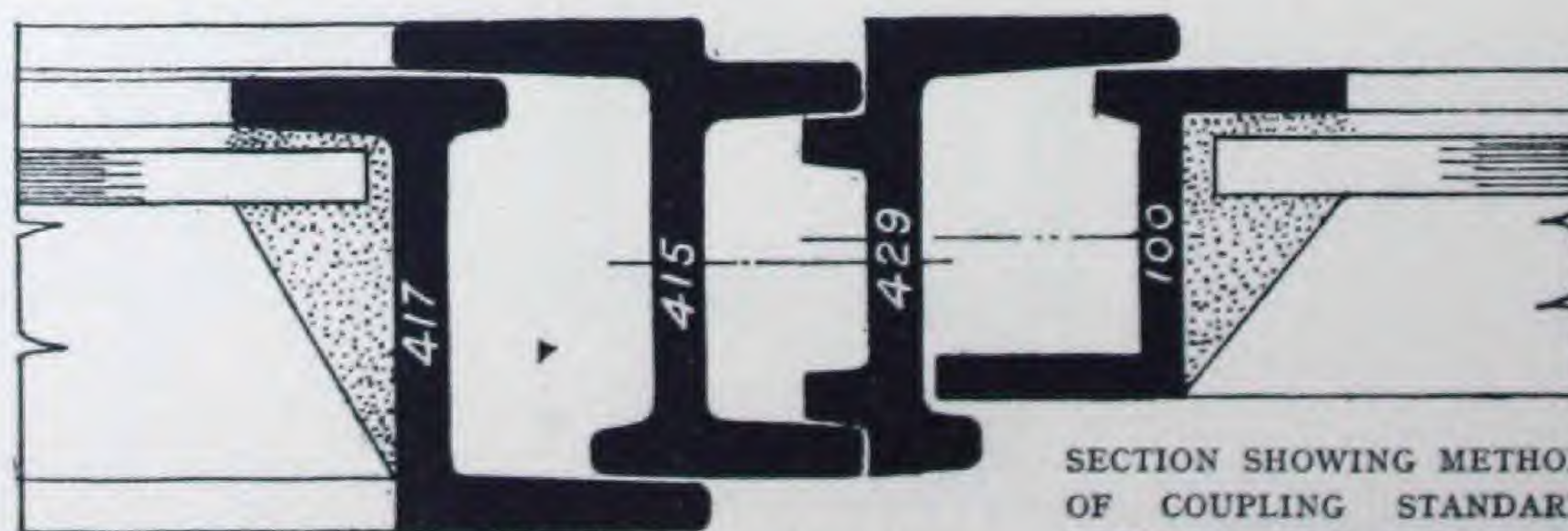
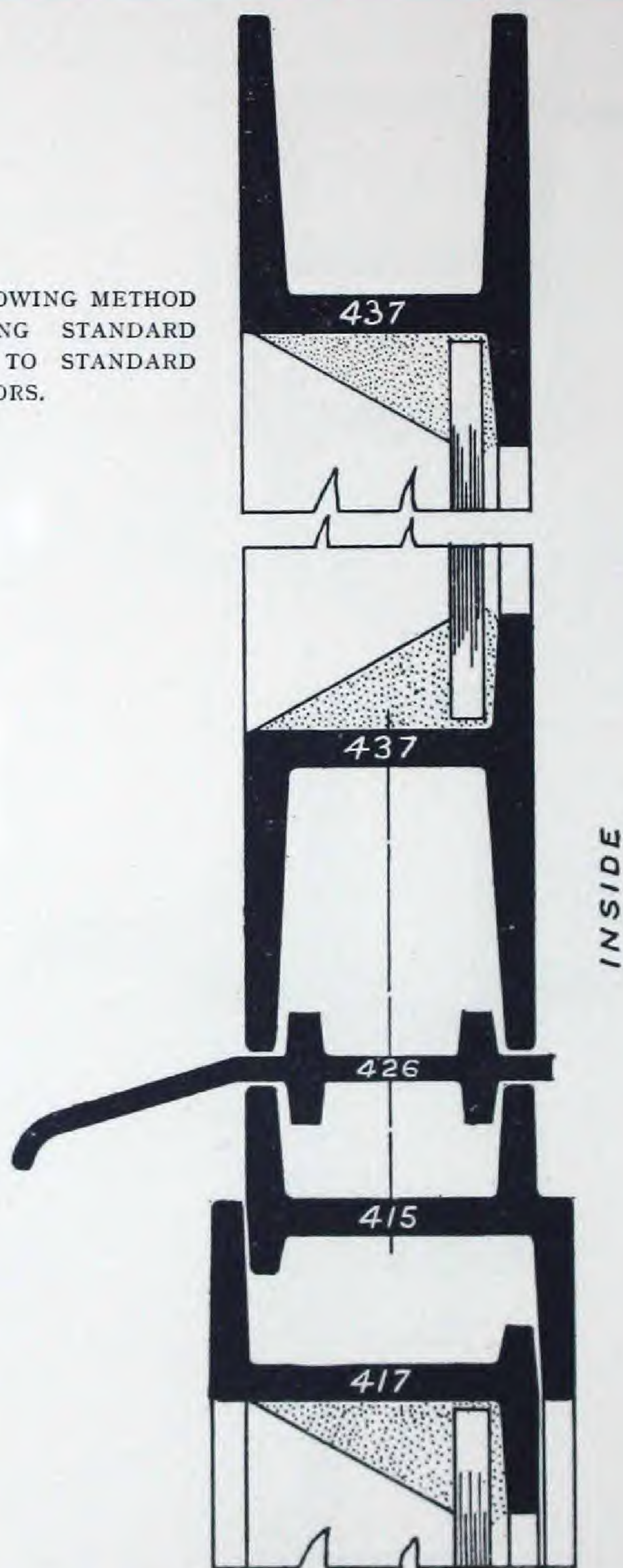
ANY OF THE AA, BB, C & D TYPE STANDARD COTTAGE CASEMENTS CAN BE COUPLED TO STANDARD FRENCH DOORS AS ILLUSTRATED BY THE EXAMPLE ON THE LEFT.

FULL SIZE
DETAILS



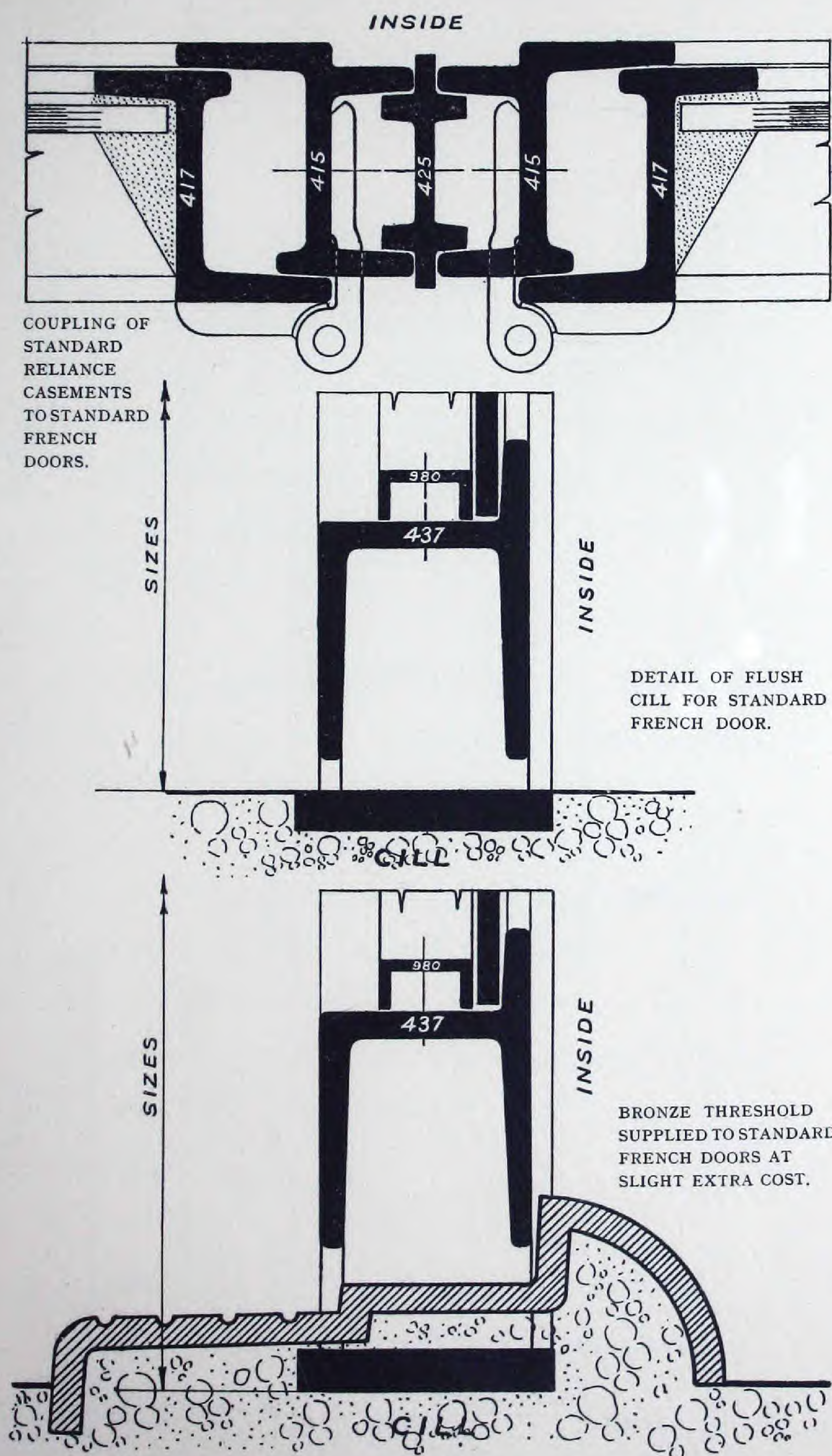
FULL SIZE
DETAILS

SECTION SHOWING METHOD
OF COUPLING STANDARD
FANLIGHTS TO STANDARD
FRENCH DOORS.



SECTION SHOWING METHOD
OF COUPLING STANDARD
COTTAGE SIDE LIGHTS TO
STANDARD FRENCH DOORS

FULL SIZE DETAILS



GLAZING SIZES

| TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width |
|------|------------------|-------------------|-------------------|-------|------------------|------------------|-------------------|-------|------------------|------------------|-------------------|------|------------------|-------------------|-------------------|
| DP | 4 | 10 $\frac{7}{8}$ | 10 $\frac{1}{16}$ | DPF1 | 2 | 8 $\frac{3}{8}$ | 10 $\frac{1}{8}$ | DCF1 | 2 | 8 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | DM2 | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 8 | 11 $\frac{1}{8}$ | 10 $\frac{1}{16}$ | | 2 | 8 $\frac{3}{8}$ | 10 $\frac{7}{16}$ | | 2 | 8 $\frac{3}{8}$ | 5 $\frac{1}{16}$ | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| | 4 | 11 $\frac{1}{8}$ | 10 $\frac{1}{16}$ | | | | | | 2 | 8 $\frac{3}{8}$ | 5 $\frac{1}{16}$ | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 3 | 11 $\frac{1}{8}$ | 10 $\frac{1}{16}$ | | | | | | 2 | 8 $\frac{3}{8}$ | 12 $\frac{1}{16}$ | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| | 1 | 11 $\frac{1}{8}$ | 5 $\frac{1}{8}$ | | | | | | | | | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 1 | 6 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| DPS | 3 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ | DPF2 | | | | DCF2 | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DM3 | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 6 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 4 | 10 $\frac{3}{4}$ | 10 $\frac{1}{16}$ | | 4 | 4 $\frac{5}{8}$ | 5 $\frac{1}{8}$ | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| | 2 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 4 | 10 $\frac{3}{4}$ | 10 $\frac{7}{16}$ | | 2 | 11 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 3 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | | | | | 2 | 11 $\frac{1}{8}$ | 5 $\frac{1}{8}$ | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| | 1 | 11 $\frac{1}{8}$ | 3 $\frac{1}{8}$ | | | | | | 2 | 11 $\frac{1}{8}$ | 12 $\frac{1}{16}$ | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 1 | 6 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | 4 | 4 $\frac{5}{8}$ | 12 $\frac{1}{16}$ | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| DM | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DPSF1 | | | | ADPF1 | | | | DC1 | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ |
| | 2 | 4 $\frac{5}{8}$ | 10 $\frac{9}{16}$ | | 3 | 8 $\frac{3}{8}$ | 8 $\frac{3}{4}$ | | 2 | 8 $\frac{3}{8}$ | 8 $\frac{9}{16}$ | | 1 | 32 $\frac{1}{16}$ | 8 $\frac{3}{4}$ |
| | 3 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | 2 | 8 $\frac{3}{8}$ | 9 | | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ |
| | 2 | 4 $\frac{5}{8}$ | 10 $\frac{9}{16}$ | | | | | | | | | | 1 | 16 $\frac{3}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 26 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | | | |
| | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | | | |
| | 2 | 4 $\frac{5}{8}$ | 10 $\frac{9}{16}$ | | | | | | | | | | | | |
| DMS | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DPSF2 | | | | ADPF2 | | | | DC2 | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | 6 | 10 $\frac{3}{4}$ | 8 $\frac{3}{4}$ | | 4 | 10 $\frac{3}{4}$ | 8 $\frac{9}{16}$ | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | | | | | 4 | 10 $\frac{3}{4}$ | 9 | | 2 | 32 $\frac{1}{16}$ | 4 $\frac{5}{8}$ |
| | 1 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 1 | 32 $\frac{1}{16}$ | 7 $\frac{1}{16}$ |
| | 1 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 1 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| | 1 | 26 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 2 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ |
| | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 1 | 16 $\frac{3}{8}$ | 7 $\frac{1}{16}$ |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | | | | | | | | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | | | | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 7 $\frac{1}{16}$ |
| DC | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DMF1 | | | | DP1 | | | | DC3 | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 2 | 4 $\frac{5}{8}$ | 12 $\frac{1}{16}$ | | 2 | 8 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | | 1 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| | 4 | 32 $\frac{1}{16}$ | 4 $\frac{5}{8}$ | | 2 | 8 $\frac{3}{8}$ | 10 $\frac{9}{16}$ | | 2 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 2 | 32 $\frac{1}{16}$ | 4 $\frac{5}{8}$ |
| | 2 | 32 $\frac{1}{16}$ | 12 $\frac{1}{16}$ | | 2 | 8 $\frac{3}{8}$ | 5 | | 1 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 1 | 32 $\frac{1}{16}$ | 17 $\frac{1}{16}$ |
| | 3 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | 1 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 2 | 4 $\frac{5}{8}$ | 12 $\frac{1}{16}$ | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| | 4 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 2 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ |
| | 2 | 16 $\frac{3}{8}$ | 12 $\frac{1}{16}$ | | | | | | | | | | 1 | 16 $\frac{3}{8}$ | 17 $\frac{1}{16}$ |
| | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ |
| | 2 | 4 $\frac{5}{8}$ | 12 $\frac{1}{16}$ | | | | | | | | | | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ |
| DCS | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DMF2 | | | | DP2 | | | | ADP1 | 1 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | 2 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ | | 4 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 2 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | 2 | 11 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | 4 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 1 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | 2 | 11 $\frac{1}{8}$ | 5 | | 2 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 1 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 2 | 32 $\frac{1}{16}$ | 4 $\frac{5}{8}$ | | 4 | 4 $\frac{5}{8}$ | 10 $\frac{9}{16}$ | | 2 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | | | |
| | 2 | 16 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | | 2 | 11 $\frac{1}{8}$ | 10 $\frac{9}{16}$ | | | | | | | | |
| | 1 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | | | |
| | 1 | 32 $\frac{1}{16}$ | 17 $\frac{1}{16}$ | | | | | | | | | | | | |
| | 1 | 16 $\frac{3}{8}$ | 17 $\frac{1}{16}$ | | | | | | | | | | | | |
| | 1 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | | | | | | | | | | | |
| ADP | 4 | 10 $\frac{7}{8}$ | 8 $\frac{9}{16}$ | DMSF1 | 2 | 8 $\frac{3}{8}$ | 4 $\frac{5}{8}$ | DP3 | 3 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ | ADP2 | 2 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ |
| | 15 | 11 $\frac{1}{8}$ | 8 $\frac{9}{16}$ | | 1 | 8 $\frac{3}{8}$ | 17 $\frac{1}{16}$ | | 6 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 8 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 4 | 11 $\frac{1}{8}$ | 8 $\frac{9}{16}$ | | | | | | 3 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 2 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 11 $\frac{1}{8}$ | 3 $\frac{5}{8}$ | | | | | | 3 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | | | |
| | 1 | 6 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | | | |
| ADPS | 3 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ | DMSF2 | 4 | 4 $\frac{5}{8}$ | 4 $\frac{5}{8}$ | DM1 | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ | ADP3 | 3 | 10 $\frac{7}{8}$ | 8 $\frac{3}{4}$ |
| | 11 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 2 | 4 $\frac{5}{8}$ | 17 $\frac{1}{16}$ | | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ | | 12 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 3 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ | | 2 | 11 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | 1 | 4 $\frac{5}{8}$ | 8 $\frac{3}{4}$ | | 3 | 11 $\frac{1}{8}$ | 8 $\frac{3}{4}$ |
| | 1 | 11 $\frac{1}{8}$ | 3 $\frac{1}{8}$ | | 1 | 11 $\frac{1}{8}$ | 17 $\frac{1}{16}$ | | | | | | | | |
| | 1 | 6 $\frac{1}{8}$ | 4 $\frac{5}{8}$ | | | | | | | | | | | | |

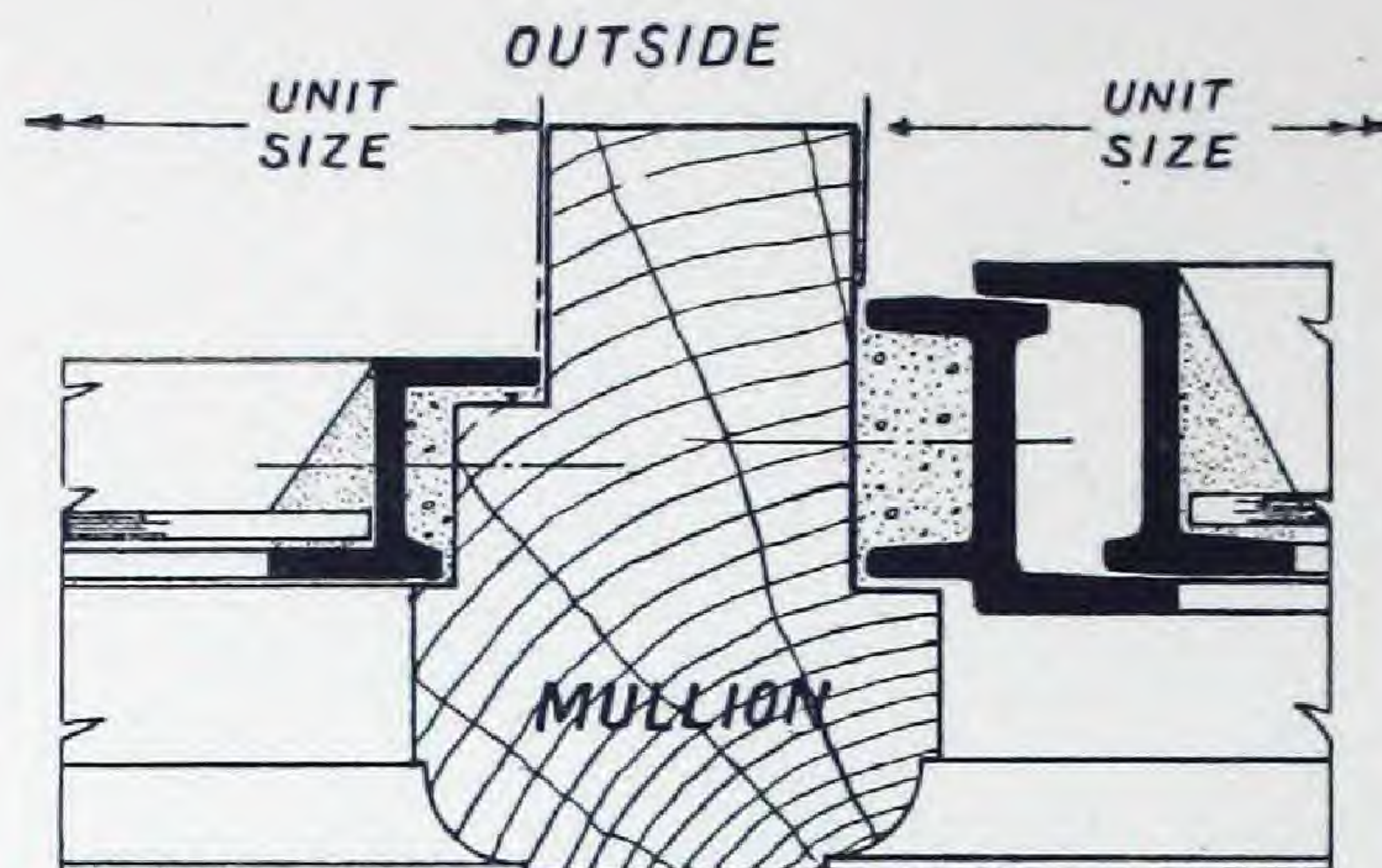
The use of Wood Surrounds in conjunction with Reliance Standard French Doors is usually more economical than the practice of obtaining Wood Surrounds from a different source and screwing in the Metal Doors.

Standard Wood Surrounds are made for all Types of Standard French Doors, Fanlights and Sidelights.

Full size details and overall sizes are shown on the following pages.

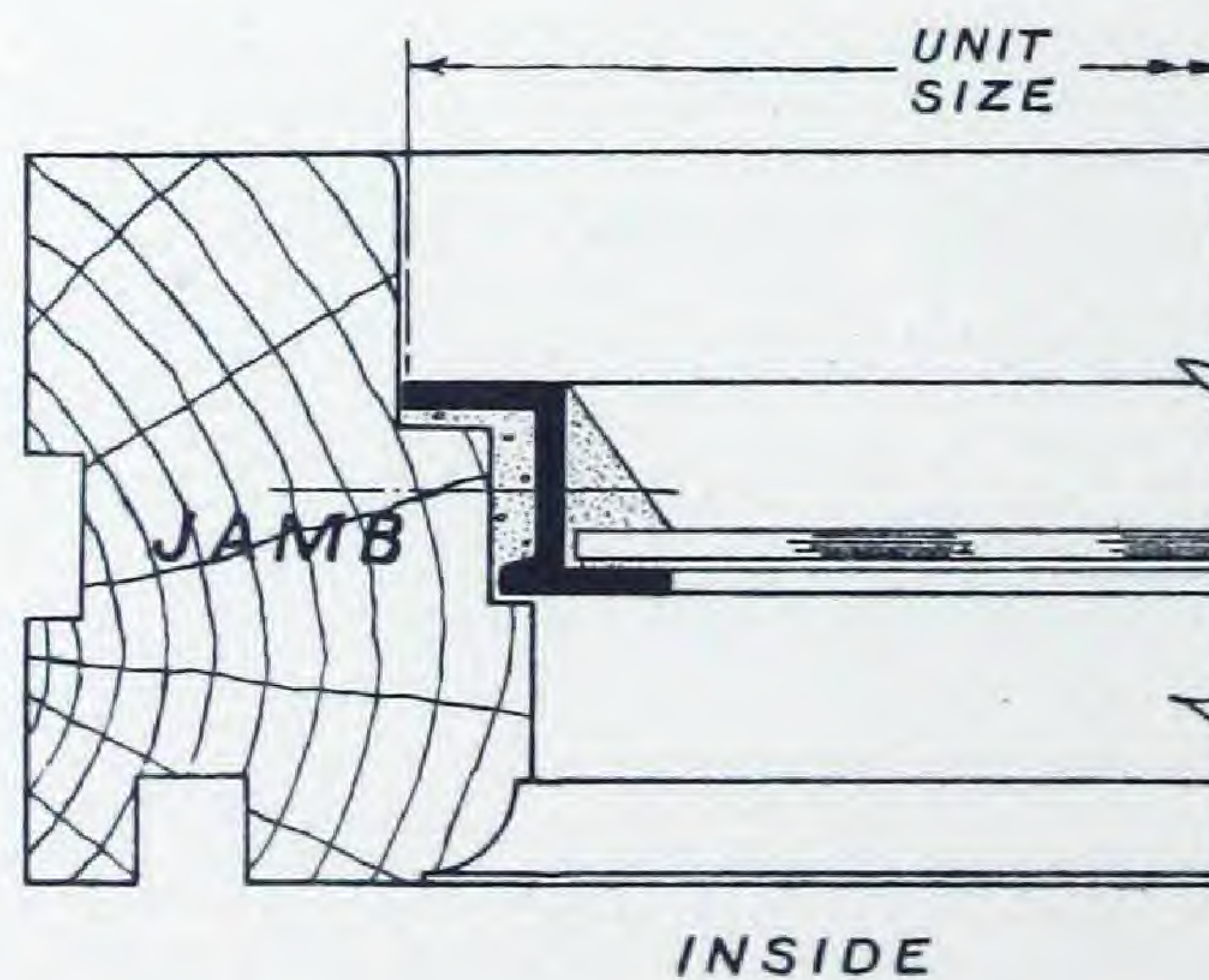
For specification of Reliance Wood Surrounds see page 54.

HALF FULL SIZE DETAILS



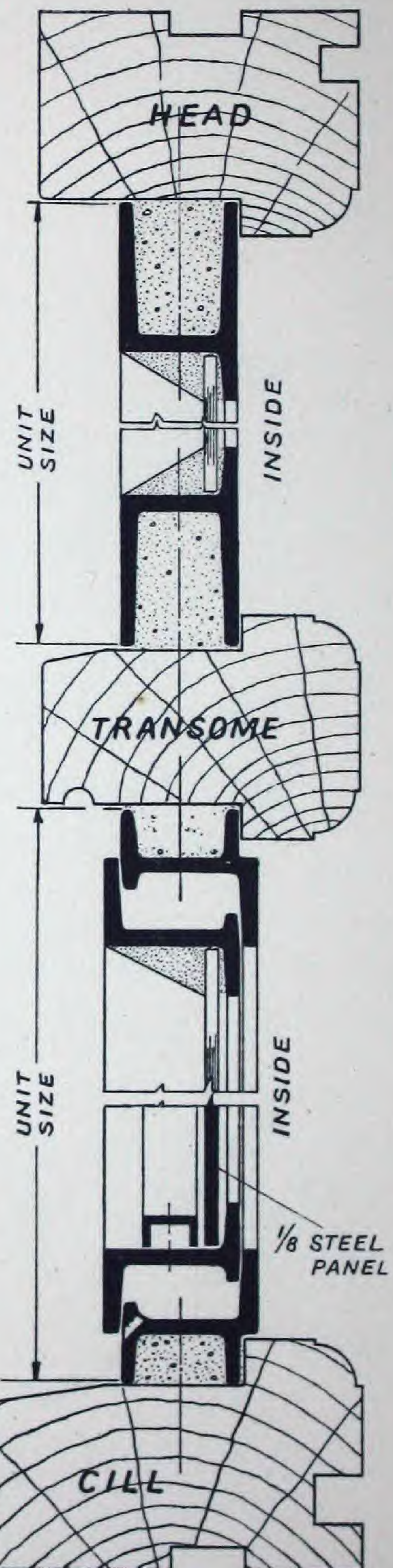
HALF FULL SIZE DETAILS OF WOOD SURROUNDS
OUT OF $3\frac{1}{2}'' \times 2\frac{1}{2}''$ MATERIAL.

WOOD SURROUNDS ARE ALSO SUPPLIED OUT OF
 $4'' \times 3''$ MATERIAL.

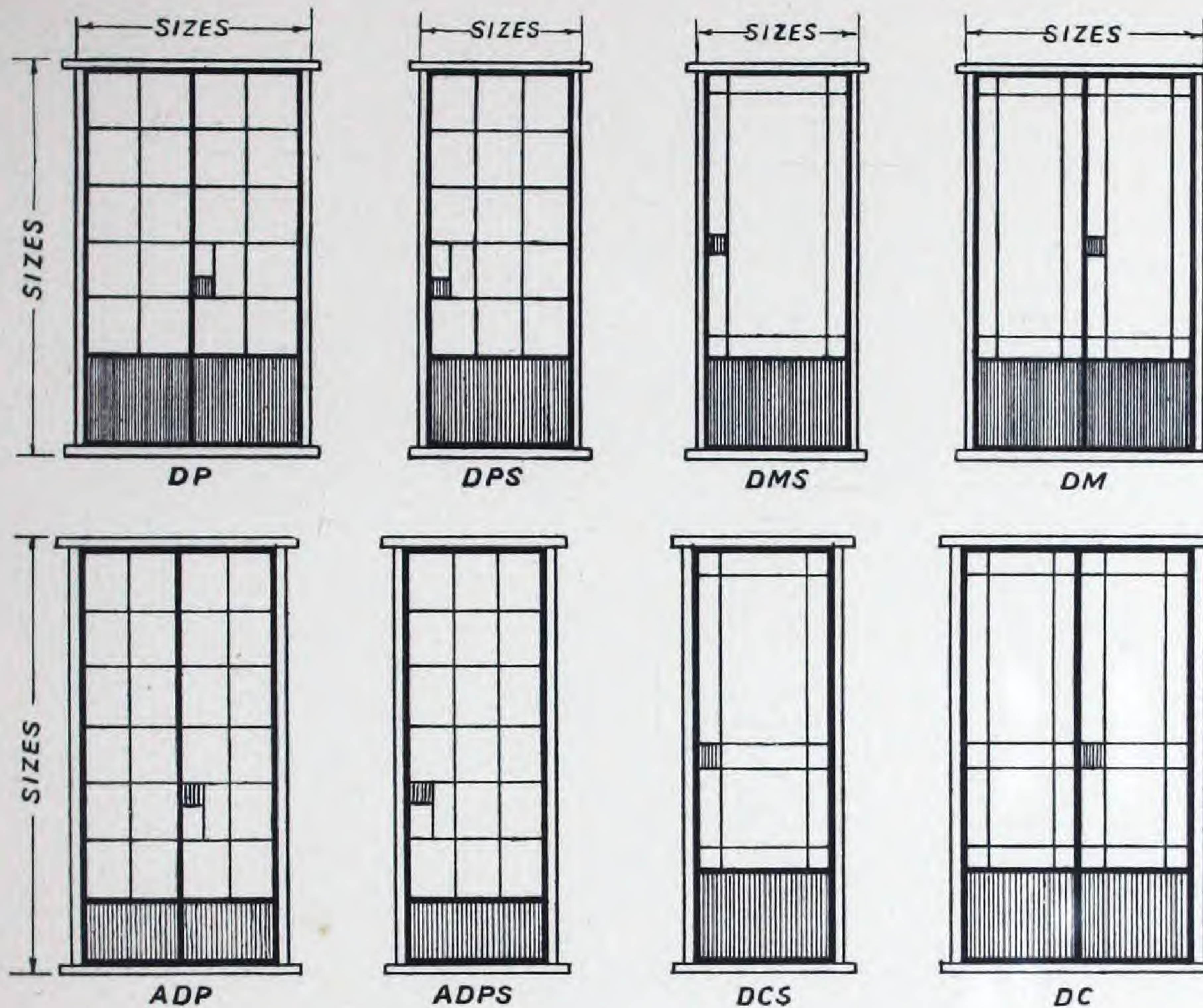


FOR SIZE OF DOORS WITHOUT
WOOD CILL DEDUCT $2\frac{1}{2}''$ FROM
OVERALL SIZES GIVEN ON
PAGE 53.

BRONZE THRESHOLD
SUPPLIED AT SLIGHT
EXTRA COST, AS
DETAIL ON PAGE 49.



OVERALL SIZES



OVERALL SIZES OF DOORS

| DOORS | | DP | DPS | DM | DMS | ADP | ADPS | DC | DCS |
|---|----|-----------|-------------|-----------|-------------|----------|--------------|-----------|-------------|
| In 3½" x 2½" Wood Surrounds | H. | 6 10½ | 6 10½ | 6 10½ | 6 10½ | 7 4½ | 7 4½ | 7 4½ | 7 4½ |
| | W. | 4 1 | 2 10 | 4 1 | 2 10 | 3 7½ | 2 10 | 4 4 | 2 10 |
| In 4" x 3" Wood Surrounds | H. | 6 11 | 6 11 | 6 11 | 6 11 | 7 5 | 7 5 | 7 5 | 7 5 |
| | W. | 4 2 | 2 11 | 4 2 | 2 11 | 3 8½ | 2 11 | 4 5 | 2 11 |
| DOORS and FANLIGHTS | | DP & DPF1 | DPS & DPSF1 | DM & DMF1 | PMS & DMSF1 | ADP & G8 | ADPS & DPSF1 | DC & DCF1 | DCS & DMSF1 |
| In 3½" x 2½" Wood Surrounds with Steel Transome | H. | 7 10 1/16 | 7 10 1/16 | 7 10 1/16 | 7 10 1/16 | 8 4 1/16 | 8 4 1/16 | 8 4 1/16 | 8 4 1/16 |
| | W. | 4 1 | 2 10 | 4 1 | 2 10 | 3 7½ | 2 10 | 4 4 | 2 10 |
| In 4" x 3" Wood Surrounds with Steel Transome | H. | 7 10 1/16 | 7 10 1/16 | 7 10 1/16 | 7 10 1/16 | 8 4 1/16 | 8 4 1/16 | 8 4 1/16 | 8 4 1/16 |
| | W. | 4 2 | 2 11 | 4 2 | 2 11 | 3 8½ | 2 11 | 4 5 | 2 11 |
| In 3½" x 2½" Wood Surrounds with Wood Transome | H. | 7 11½ | 7 11½ | 7 11½ | 7 11½ | 8 5½ | 8 5½ | 8 5½ | 8 5½ |
| | W. | 4 1 | 2 10 | 4 1 | 2 10 | 3 7½ | 2 10 | 4 4 | 2 10 |
| In 4" x 3" Wood Surrounds with Wood Transome | H. | 8 0½ | 8 0½ | 8 0½ | 8 0½ | 8 6½ | 8 6½ | 8 6½ | 8 6½ |
| | W. | 4 2 | 2 11 | 4 2 | 2 11 | 3 8½ | 2 11 | 4 5 | 2 11 |
| DOORS and FANLIGHTS | | DP & DPF2 | DPS & DPSF2 | DM & DMF2 | DMS & DMSF2 | ADP & E8 | ADPS & DPSF2 | DC & DMF2 | DCS & DMSF2 |
| In 3½" x 2½" Wood Surrounds with Steel Transome | H. | 8 11½ | 8 11½ | 8 11½ | 8 11½ | 9 5½ | 9 5½ | 9 5½ | 9 5½ |
| | W. | 4 1 | 2 10 | 4 1 | 2 10 | 3 7½ | 2 10 | 4 4 | 2 10 |
| In 4" x 3" Wood Surrounds with Steel Transome | H. | 9 0 | 9 0 | 9 0 | 9 0 | 9 6 | 9 6 | 9 6 | 9 6 |
| | W. | 4 2 | 2 11 | 4 2 | 2 11 | 3 8½ | 2 11 | 4 5 | 2 11 |
| In 3½" x 2½" Wood Surrounds with Wood Transome | H. | 9 0 1/16 | 9 0 1/16 | 9 0 1/16 | 9 0 1/16 | 9 6 1/16 | 9 6 1/16 | 9 6 1/16 | 9 6 1/16 |
| | W. | 4 1 | 2 10 | 4 1 | 2 10 | 3 7½ | 2 10 | 4 4 | 2 10 |
| In 4" x 3" Wood Surrounds with Wood Transome | H. | 9 1 1/16 | 9 1 1/16 | 9 1 1/16 | 9 1 1/16 | 9 7 1/16 | 9 7 1/16 | 9 7 1/16 | 9 7 1/16 |
| | W. | 4 2 | 2 11 | 4 2 | 2 11 | 3 8½ | 2 11 | 4 5 | 2 11 |

SPECIFICATION

Standard French Doors are constructed of Rolled Mild Steel Sections of first quality. All Bars are hydraulically straightened, scaled and cleaned, free from rust, hammer marks and rolling flaws.

Cross Joints of glazing bars are locked to strengthen the point of intersection. Corners are machine mitred and electrically welded.

All Standard French Doors open outwards and glaze from outside unless especially ordered otherwise.

Each leaf is hung on 3 solid Bronze hinges. Right hand leaf is fitted with handle and 4 lever lock, the left leaf is fitted with Bronze shoot bolts at top and bottom.

The kicking panels are of steel plate bedded in mastic and secured by steel beads.

The standard cill is as shown on page 48. If flush cill or bronze threshold is required (see page 49) these must be specified.

All steel-work receives a coat of anti-corrosive weather resisting paint before despatch.

SPECIFICATION OF WOOD SURROUNDS.

The heads and jambs out of $3\frac{1}{2}$ -in. x $2\frac{1}{2}$ -in. Deal. Cills from 6-in. x 3-in. Oak.* All timber is selected, seasoned, free from knots and shakes.

Heads, Transomes and Cills are throated on the under-side and worked according to details (see page 52).

Heads and jambs are ploughed on the inside face to receive internal plaster. Cills prepared to receive floor boards.

Outside face (against wall) is ploughed to receive bedding cement to form effective weather check.

Heads and Cills project beyond jambs to form horns for building in.

Wood Surrounds are well primed before despatch.

Steel Doors are bedded in mastic cement and screwed to surrounds.

* Cills are included and the sizes given on page 53 are over the cill. If no wood cill is required this must be stated and the heights reduced by $2\frac{1}{4}$ ". When comparing estimates it is advisable to ascertain whether cills are included.

ARCHITECTS SPECIFICATION.

Steel doors (with wood surround and cill)* to be Reliance Standard French Doors manufactured by Messrs. Williams and Williams Ltd., Reliance Works, Chester.

All doors to be fitted with Reliance Standard Bronze Door furniture.

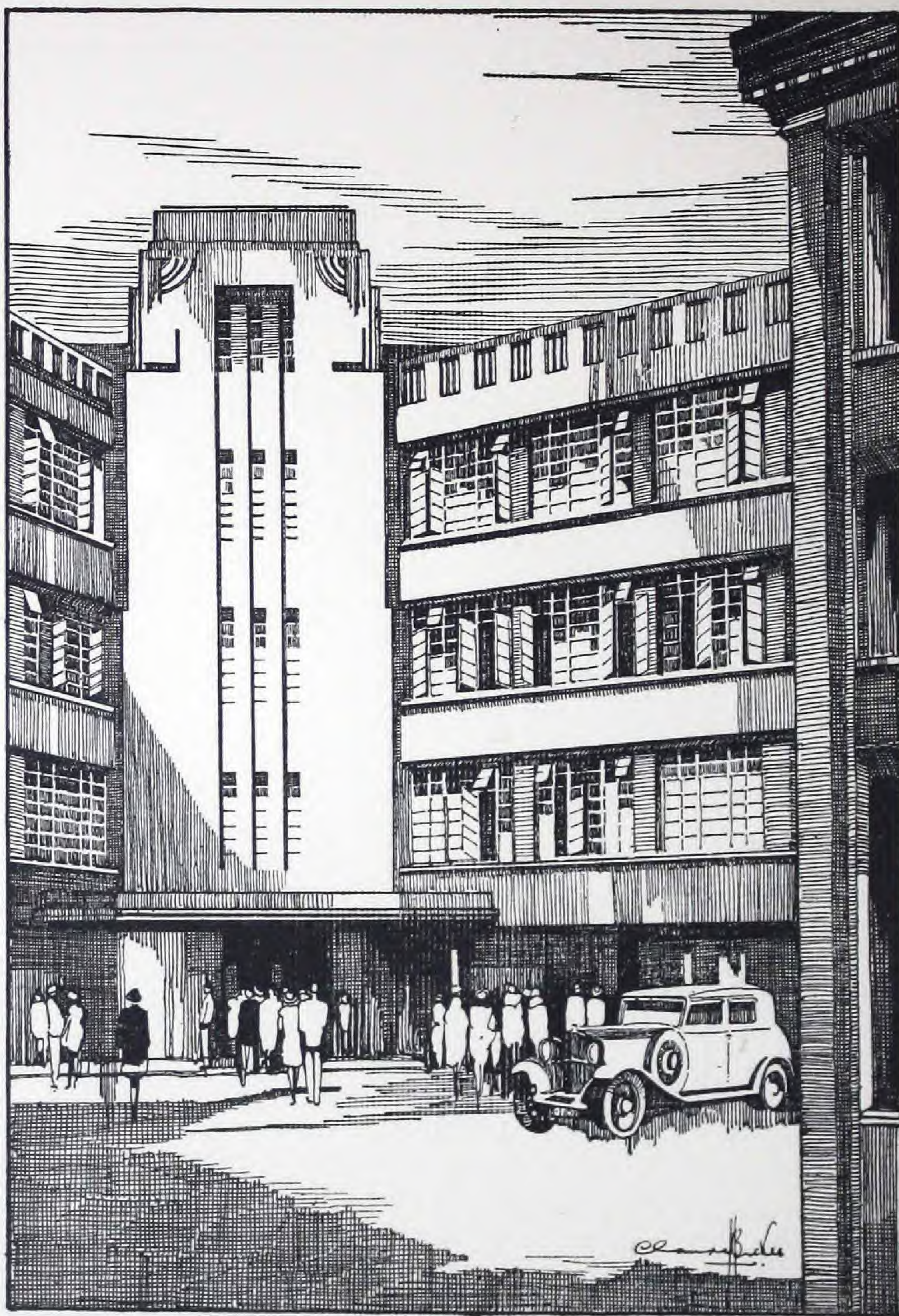
Type of cill required should be stated (see page 49).

* Delete if not required.

Owing to the rapid advances made in Metal Casement Manufacture we reserve the right to embody any change or improvement into the details shown in this Catalogue.



STANDARD
RELIANCE
CASEMENTS



The rapidly growing demand for a heavier and better class Steel Casement than that offered by the Standard "Cottage" Window has led to the introduction of

"RELIANCE"
STANDARD CASEMENTS
(400 Series)

These are now dealt with in this third section of our Standard Catalogue.

Details and construction are similar to, and the sections identical with purpose made windows in Reliance heavy Series.

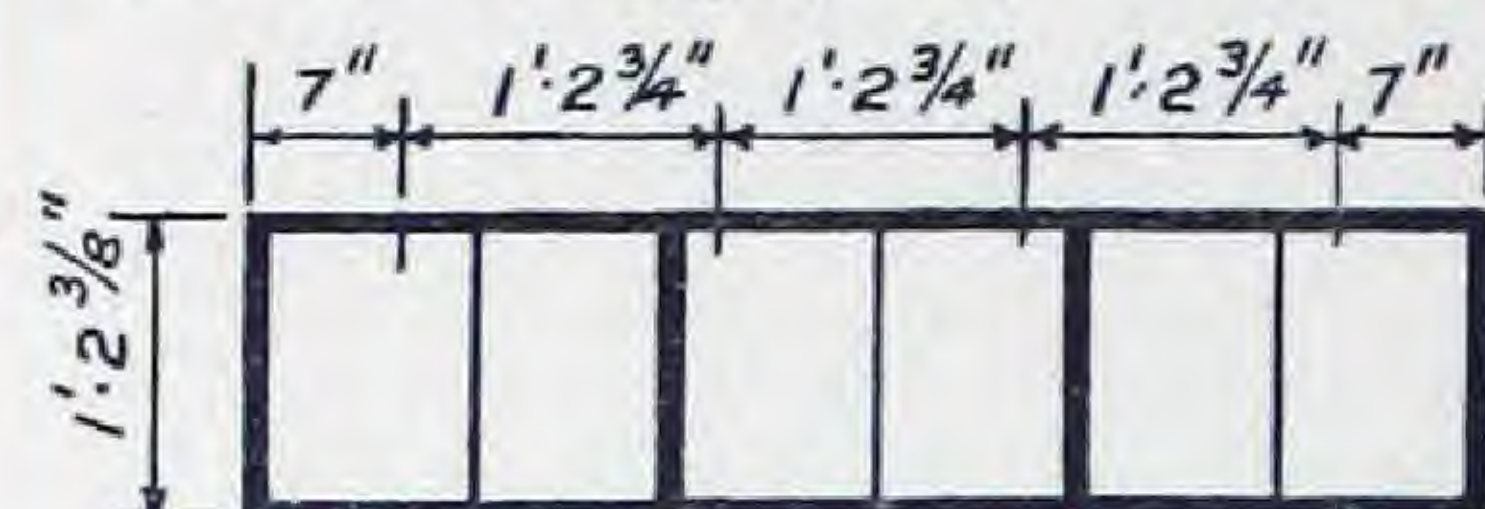
In order to offer a more economical window than the purpose made, Standard types and sizes have been adopted and all types are shown in the following pages.

Practically any desired design of Window can be obtained by coupling together Standard units.

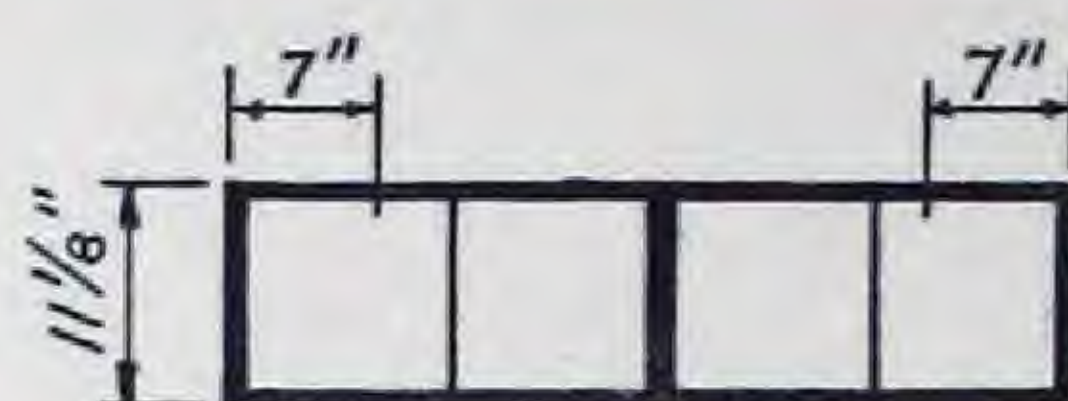
Mullion and Transome coupling bars are rolled with two continuous ribs to give double weathering and to withstand wind pressure or other strains which otherwise would be taken by the coupling bolts. The specially designed weather bar, which is incorporated with the transome gives added protection, and the window is thus made completely weather-proof.

STANDARD RELIANCE

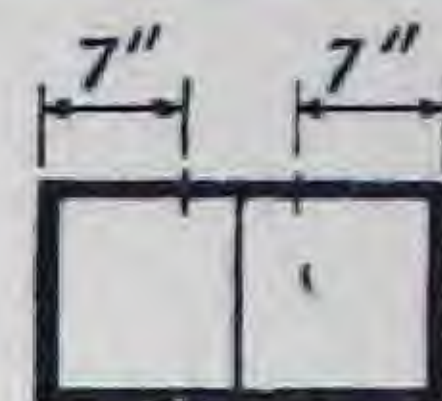
6 PANE WIDE WINDOWS
CAN BE MADE WITH ONE
OPENING CASEMENT IN
CENTRE IF REQUIRED.



R 61



TR 41



TR 21

ALL 11 1/8", 1'2 3/8"
AND 2'1 5/8" HIGH
TYPES CAN
BE MADE TO
OPEN AS TOP
HUNG IF SO
DESIRED.



R 41



R 21



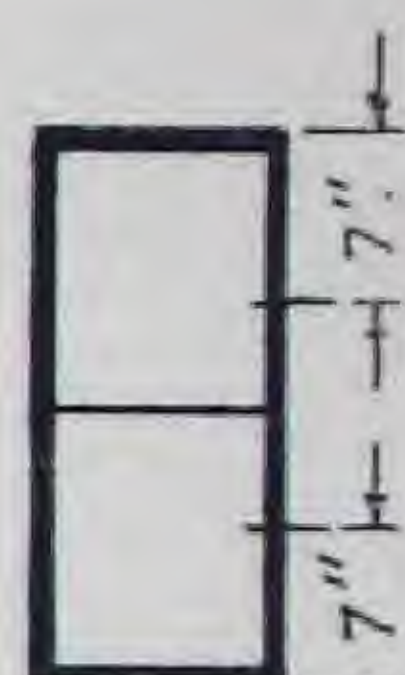
R 62



R 42



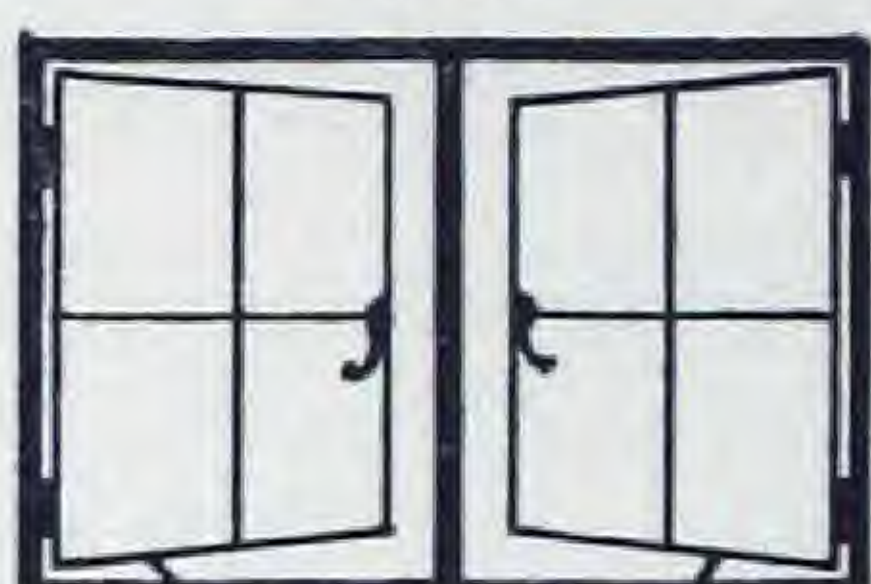
R 22



R 12



R 6224



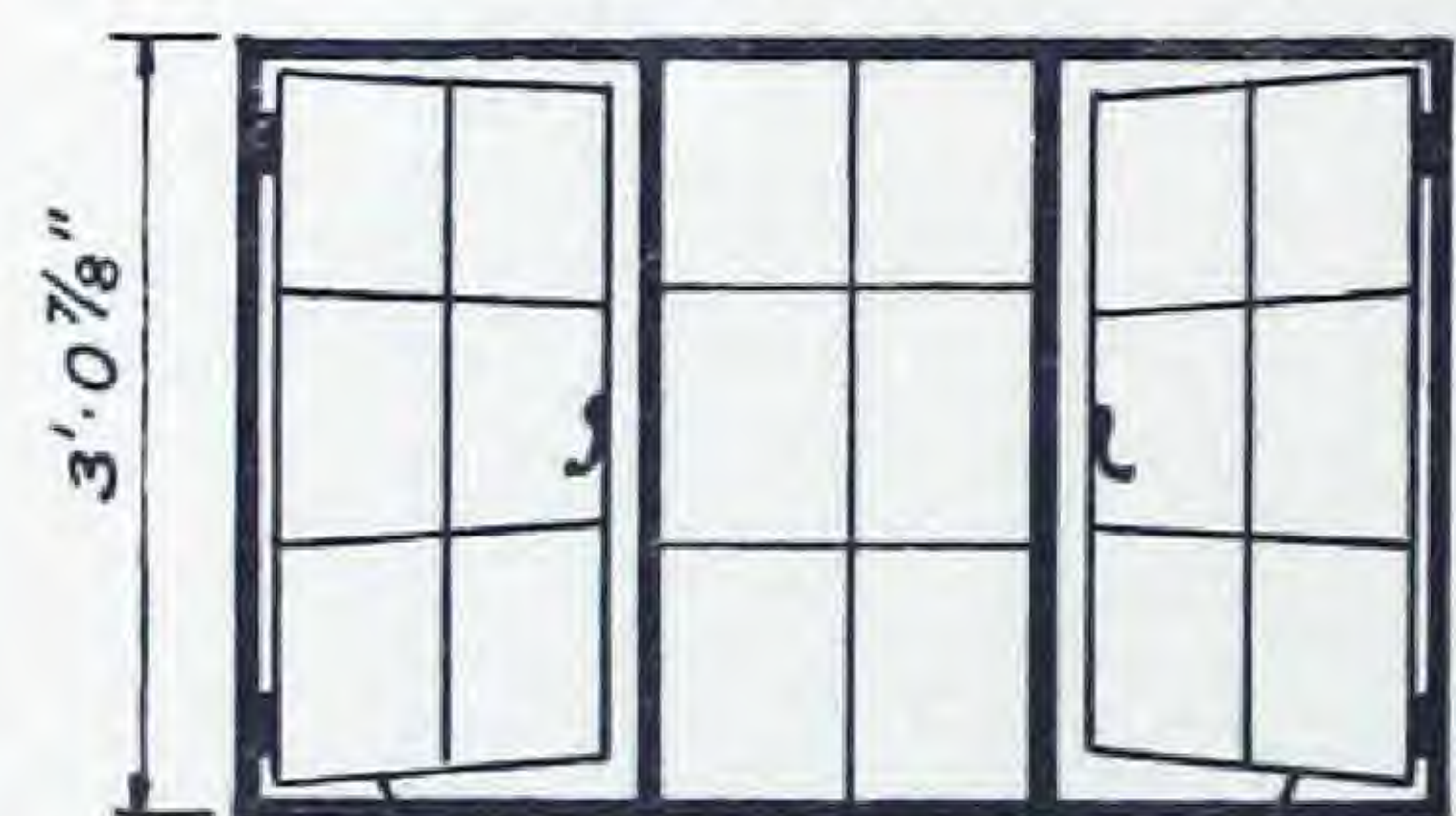
R 4224



R 2214



R 1212



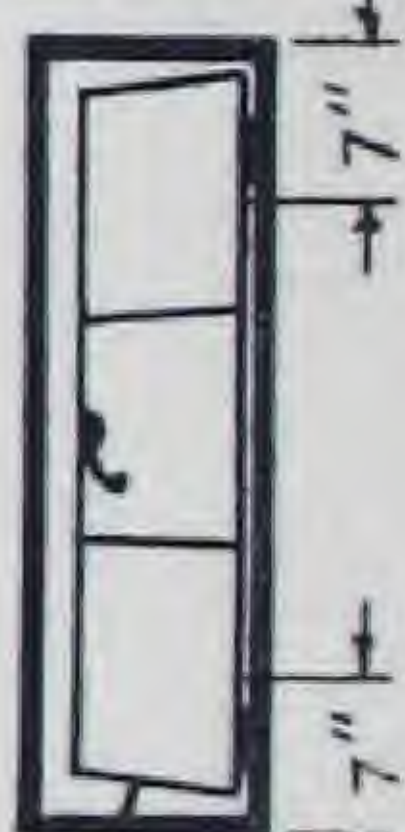
R 6326



R 4326



R 2316



R 1313



R 6428



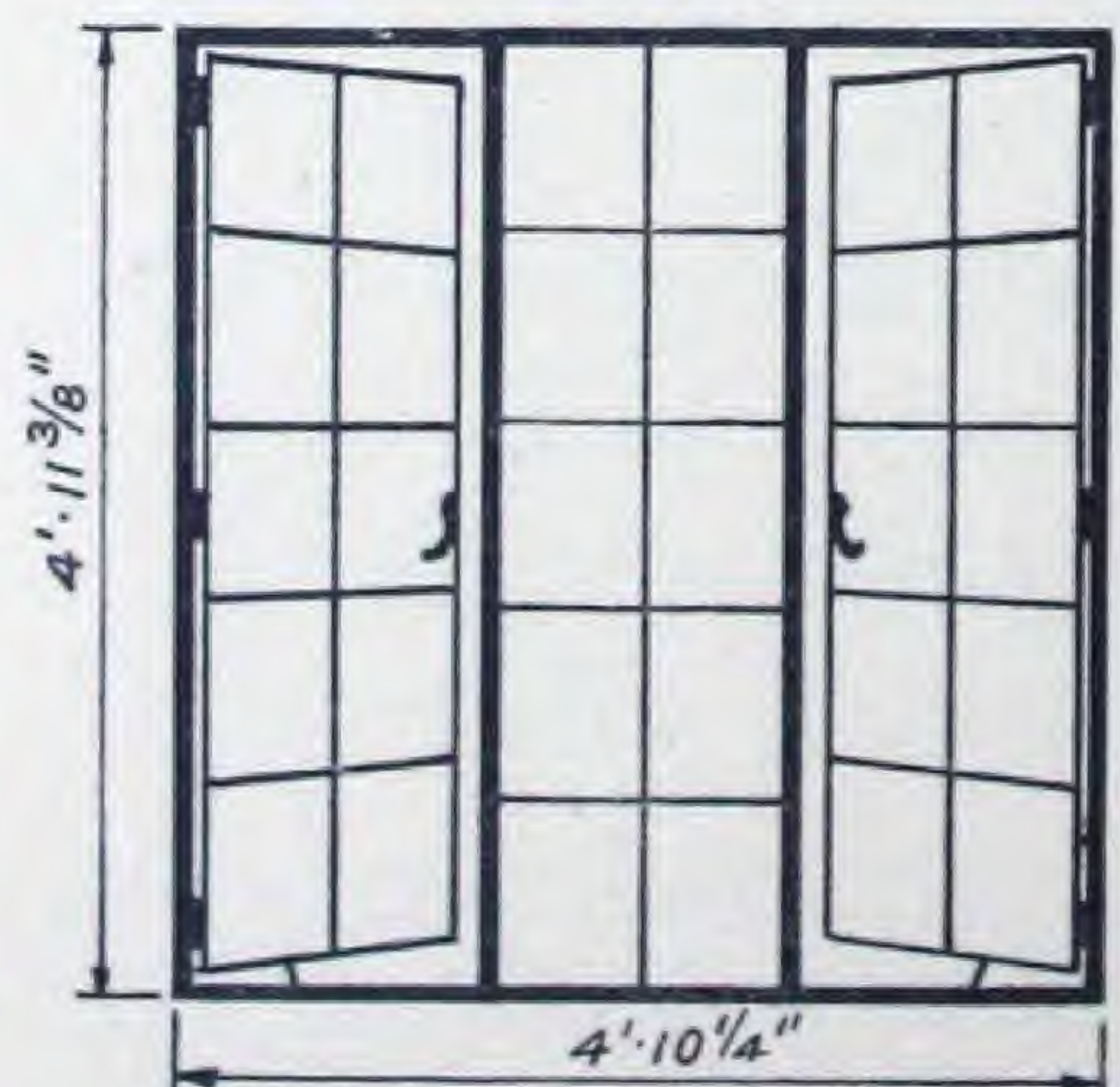
R 4428



R 2418



R 1414



R 65210



R 45210



R 25110

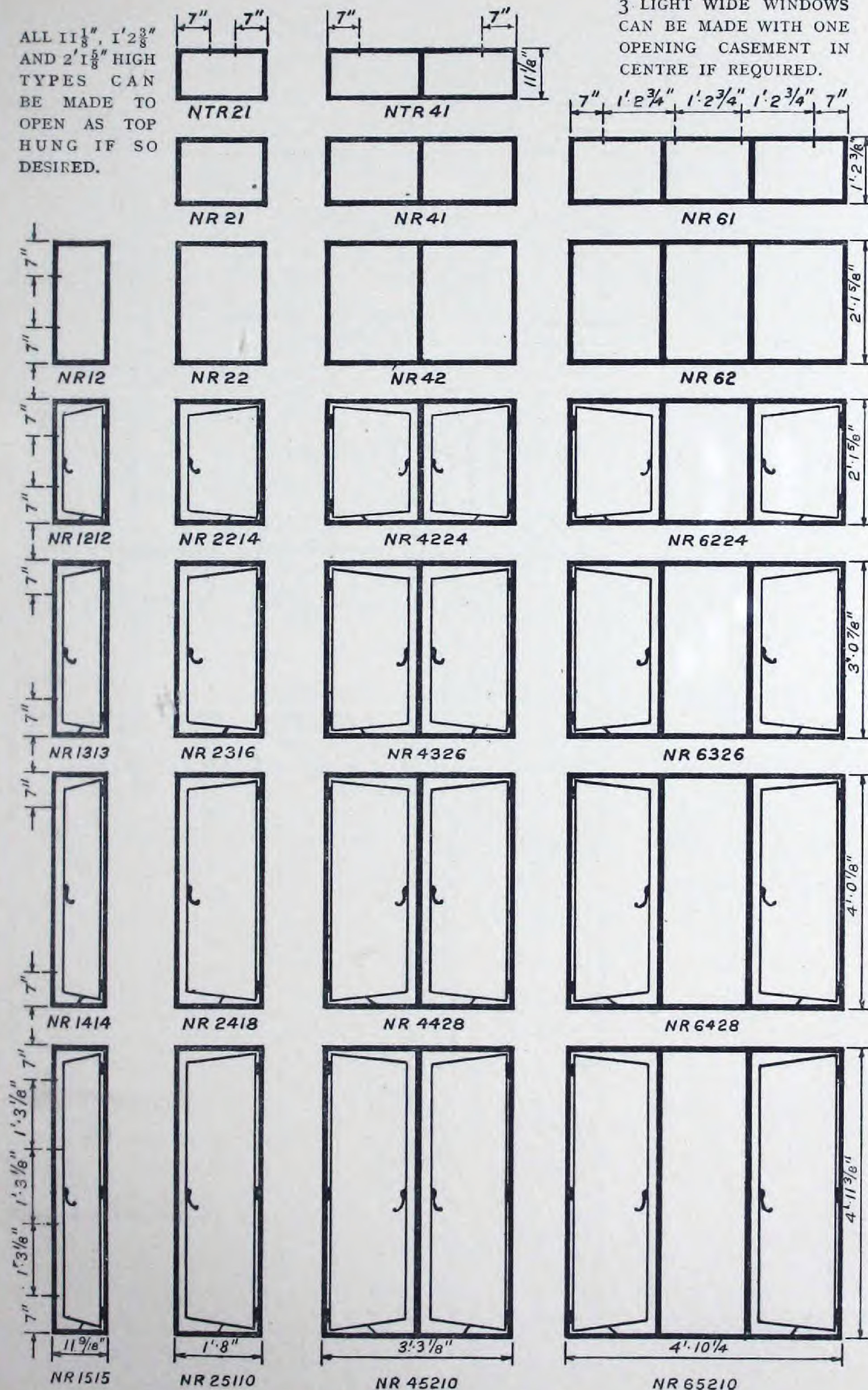


R 1515

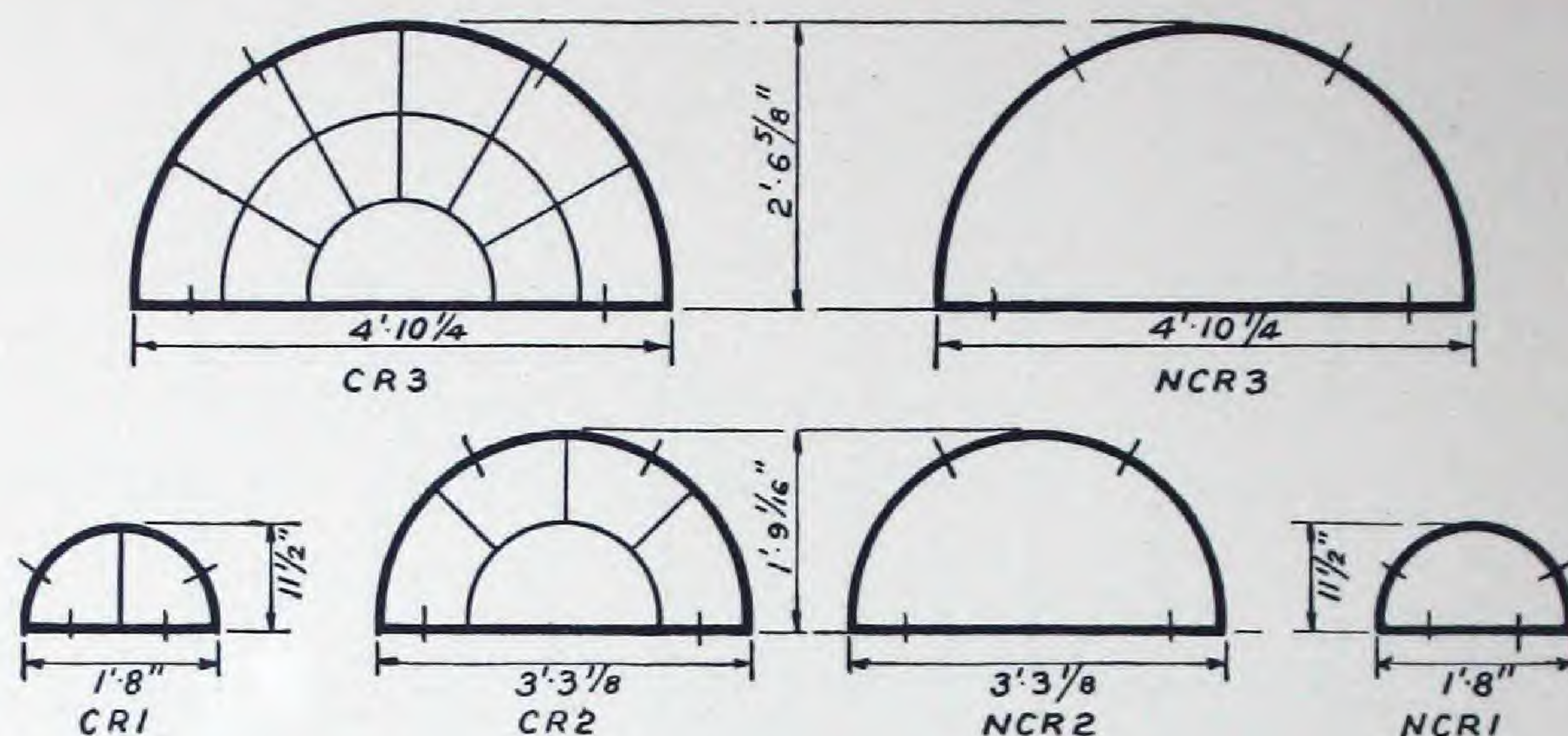
TYPES & SIZES

ALL 11 $\frac{1}{8}$ " 1'2 $\frac{3}{8}$ "
AND 2'1 $\frac{5}{8}$ " HIGH
TYPES CAN
BE MADE TO
OPEN AS TOP
HUNG IF SO
DESIRED.

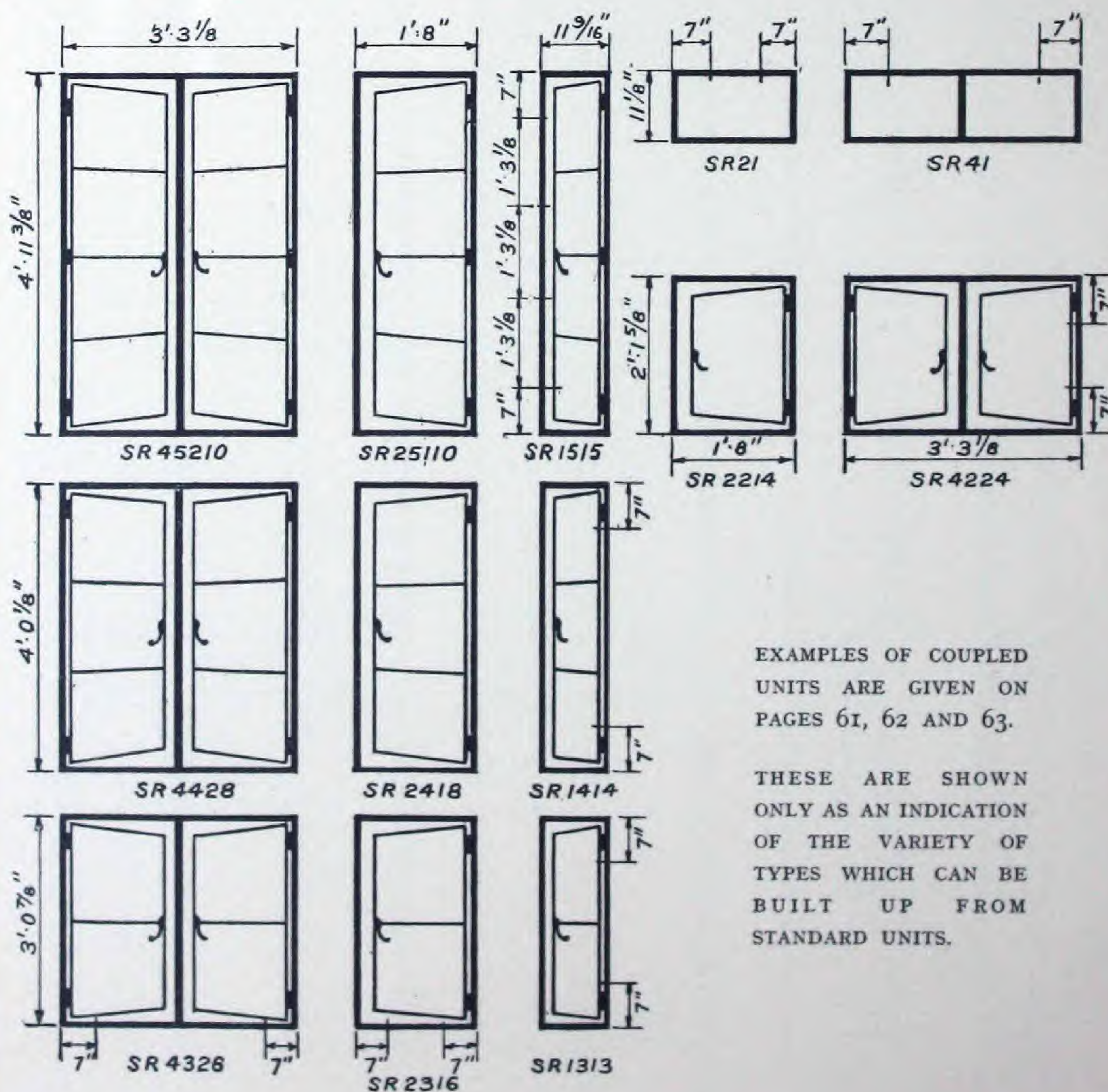
3 LIGHT WIDE WINDOWS
CAN BE MADE WITH ONE
OPENING CASEMENT IN
CENTRE IF REQUIRED.



TYPES & SIZES



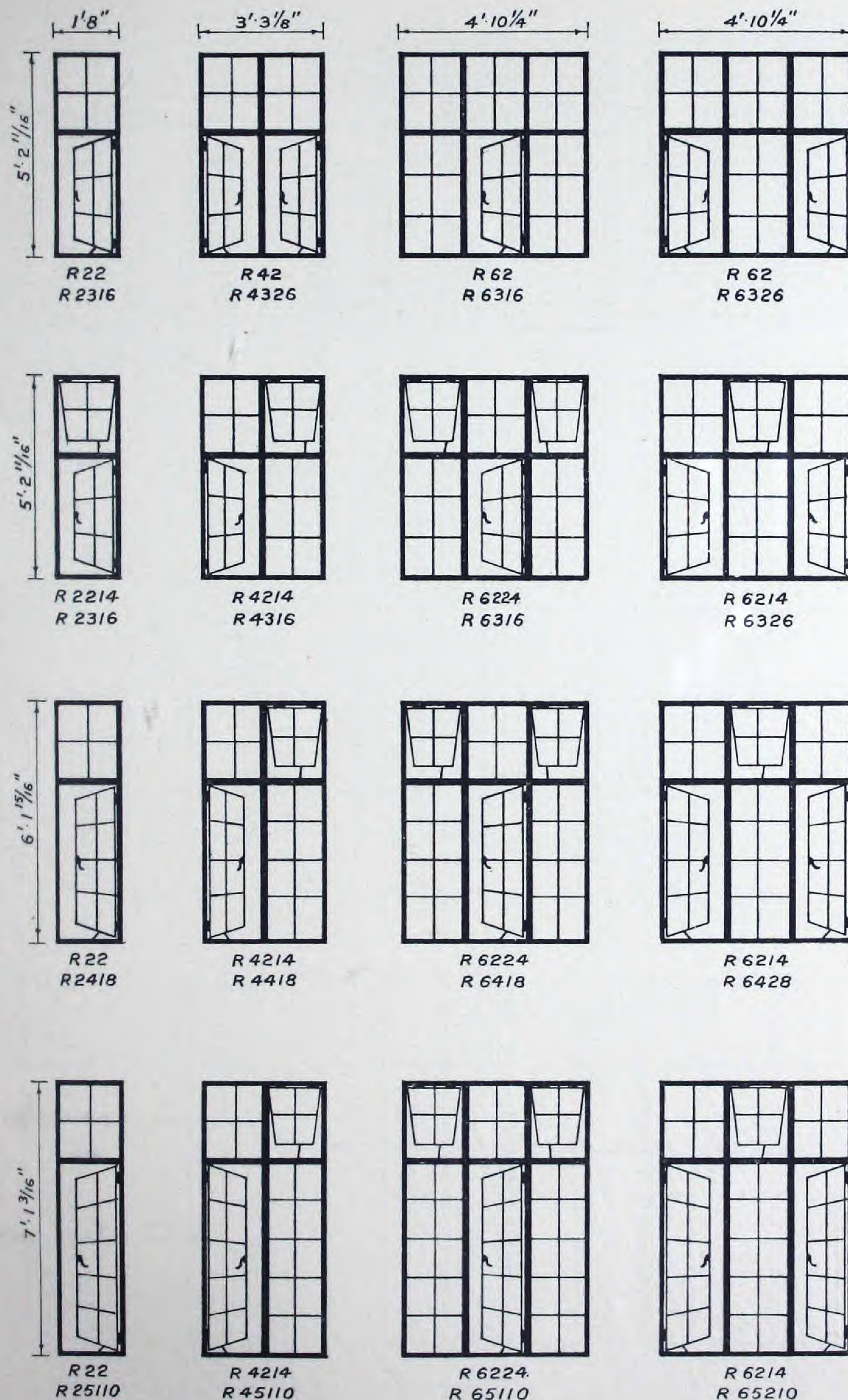
SPANISH TYPES



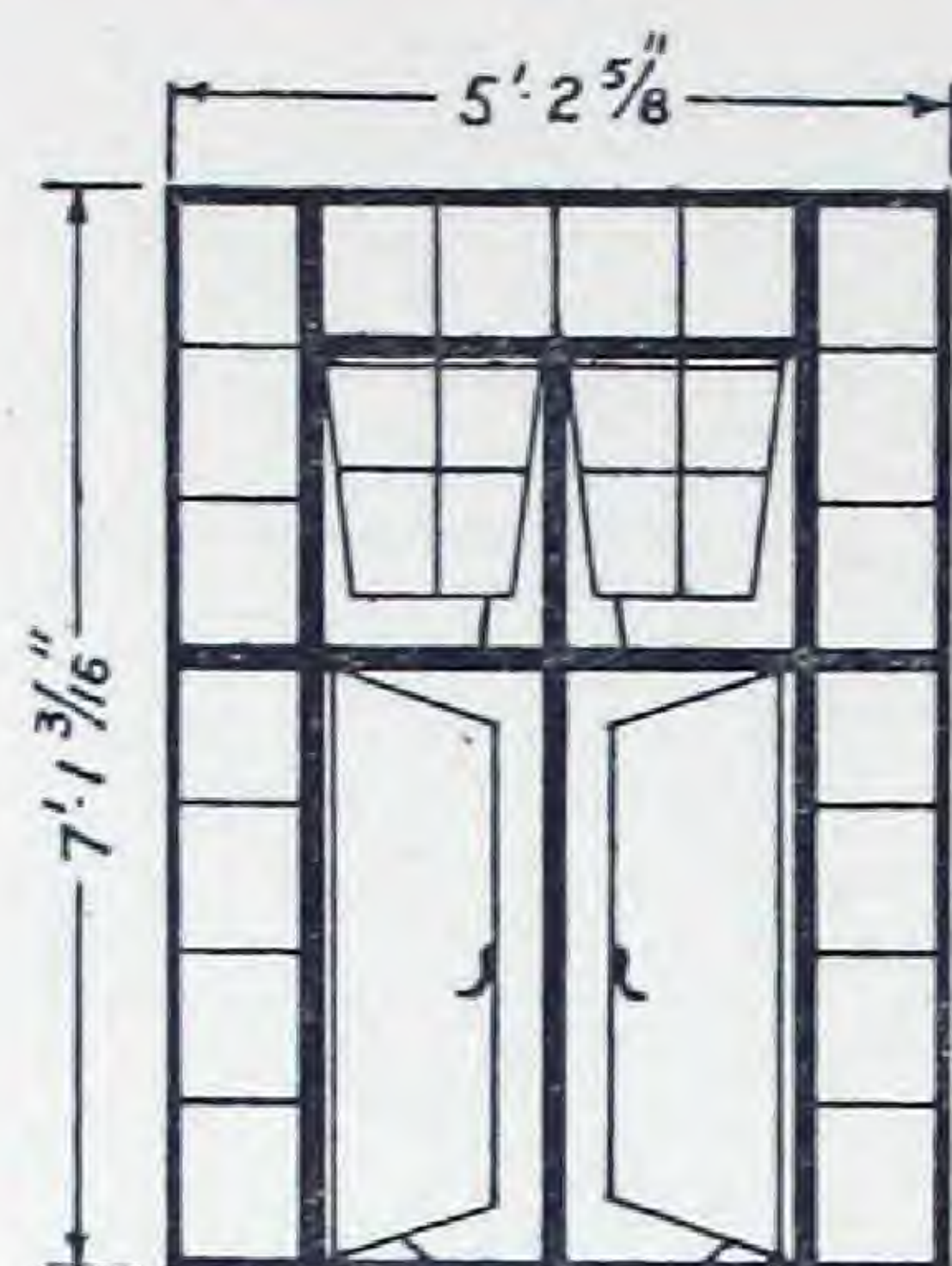
EXAMPLES OF COUPLED
UNITS ARE GIVEN ON
PAGES 61, 62 AND 63.

THESE ARE SHOWN
ONLY AS AN INDICATION
OF THE VARIETY OF
TYPES WHICH CAN BE
BUILT UP FROM
STANDARD UNITS.

COUPLED TYPES



STANDARD RELIANCE



R13/TR41/R13
R4224
R14/NR4428/R14



TR61
R6241
NR6428



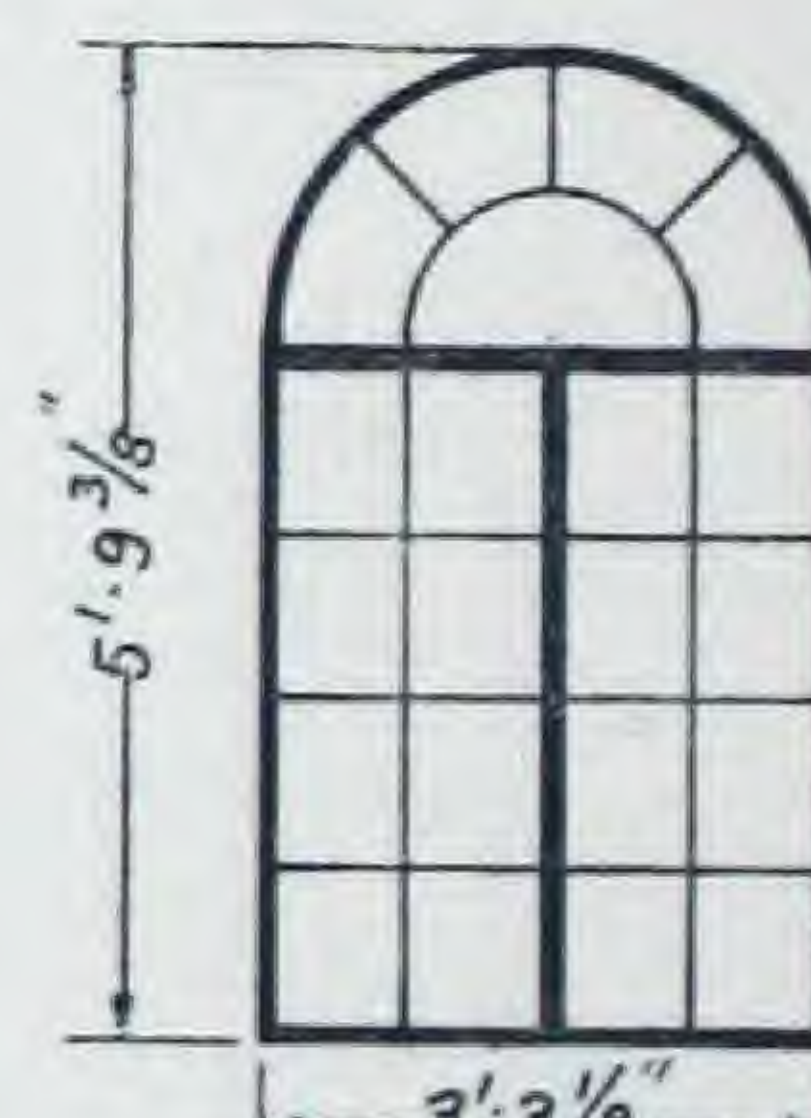
R13/R43/R13
NR14/NR4428/NR14



CR2
R4424



CR2
R43/45210



CR2
R44



NR12/NR4424/NR12
NR12/NR42/NR12
NR15/NR45210/NR15

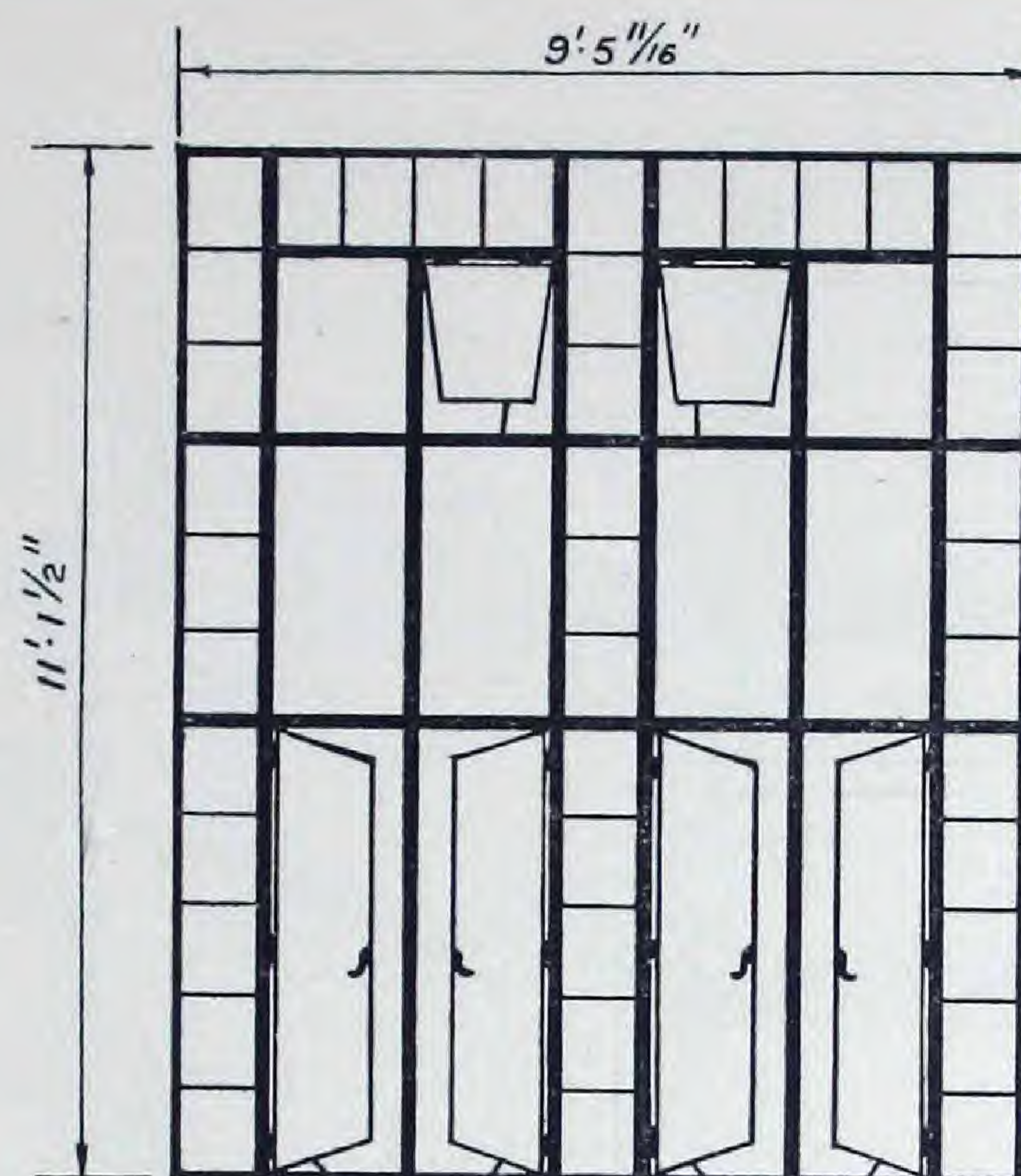


R6224
R6214
R65210

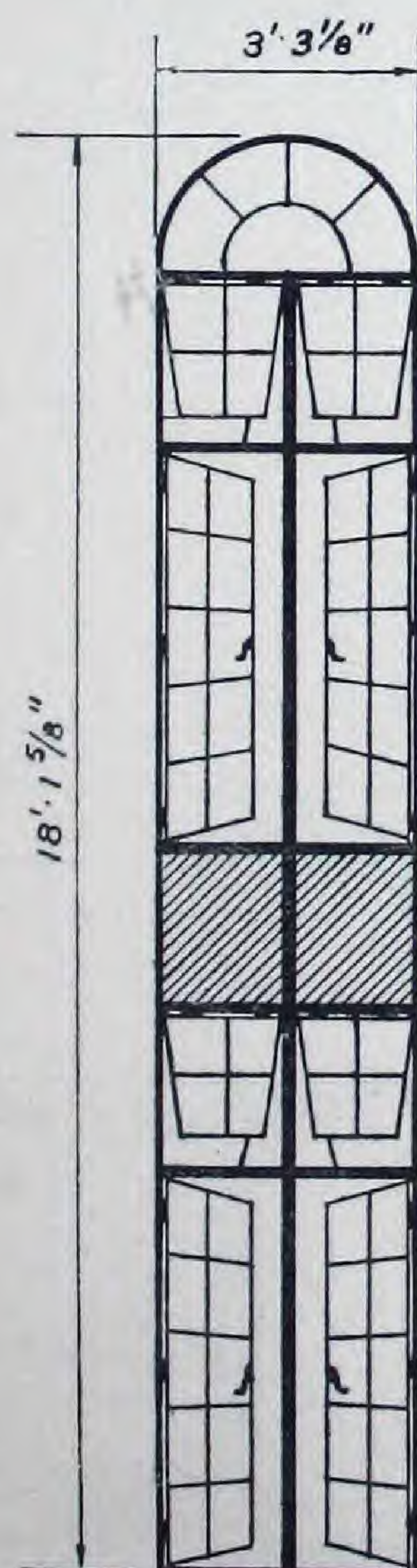


R12/R4224/R12
R12/R42/R12
R1515/R45/R1515

COUPLED TYPES



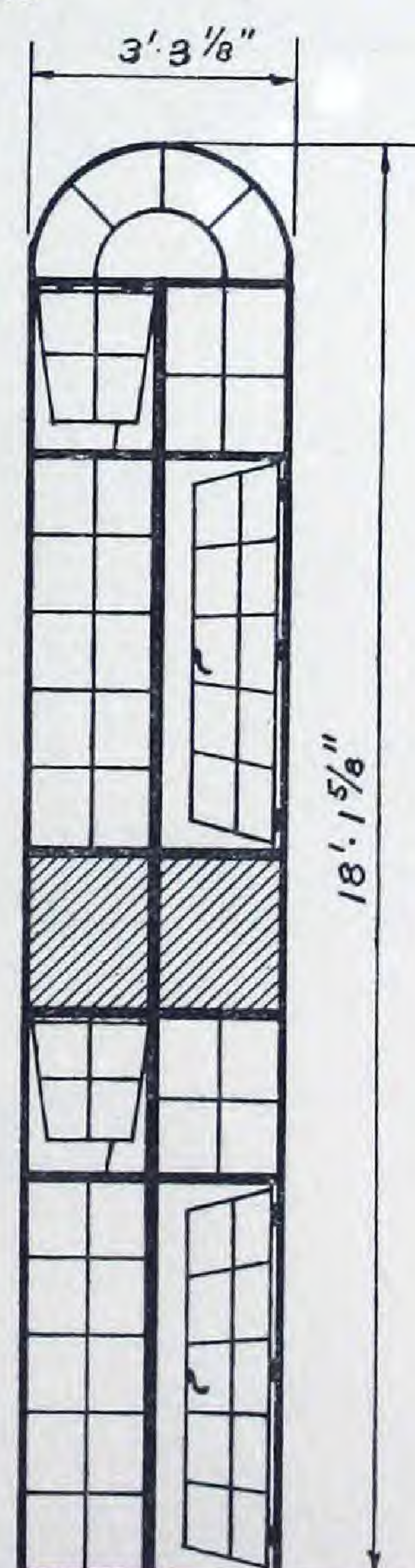
| | | | | |
|------|----------|------|----------|------|
| R 13 | TR 41 | R 13 | TR 41 | R 13 |
| R 13 | NR 42/4 | R 13 | NR 4214 | R 13 |
| R 15 | NR 43 | R 15 | NR 43 | R 15 |
| | NR 45210 | | NR 45210 | |



CR2/R4224
R45210/NR42
R4224/R45210

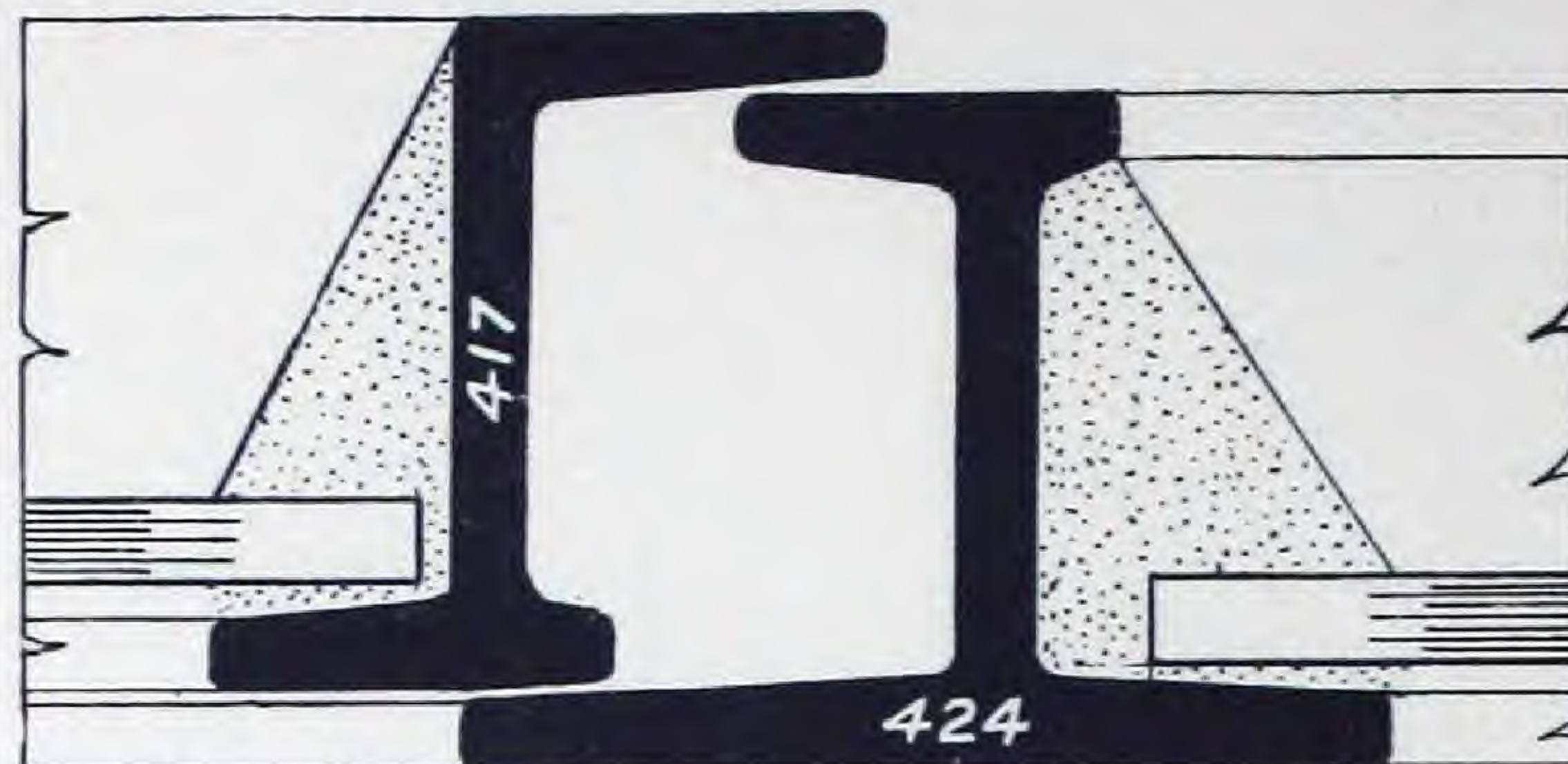
THE EXAMPLES ON
THIS PAGE SHOW
THE ADAPTABILITY
OF
STANDARD
RELIANCE
CASEMENTS
TO LARGE PUBLIC
BUILDINGS, BANKS,
SCHOOLS . . . ETC.

WHERE FLOOR JOISTS
CUT THROUGH
WINDOW OPENINGS
THE UNITS CAN BE
FILLED IN WITH
STEEL PANELS AS
SHOWN ON THE TWO
LOWER EXAMPLES.

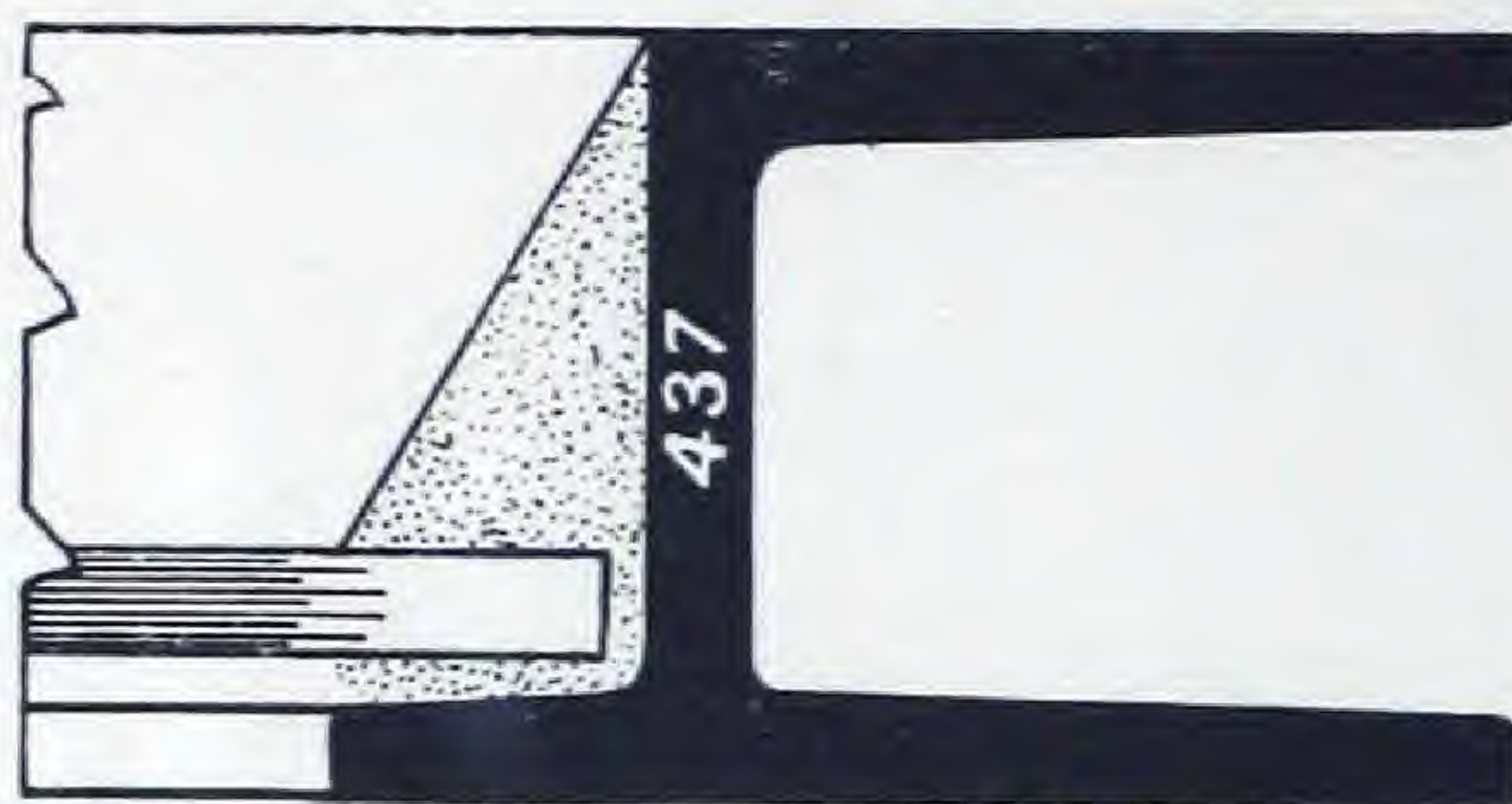


CR2/R4214
R45110/NR42
R4214/R45110

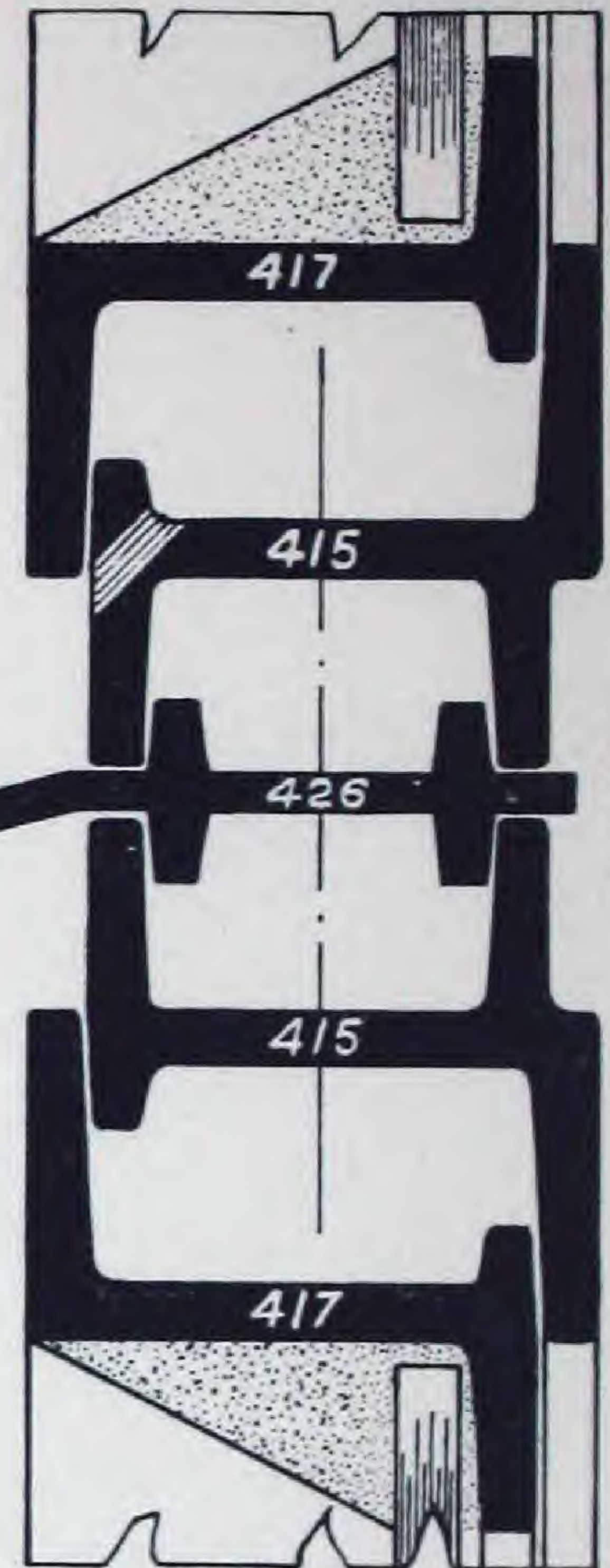
STANDARD RELIANCE



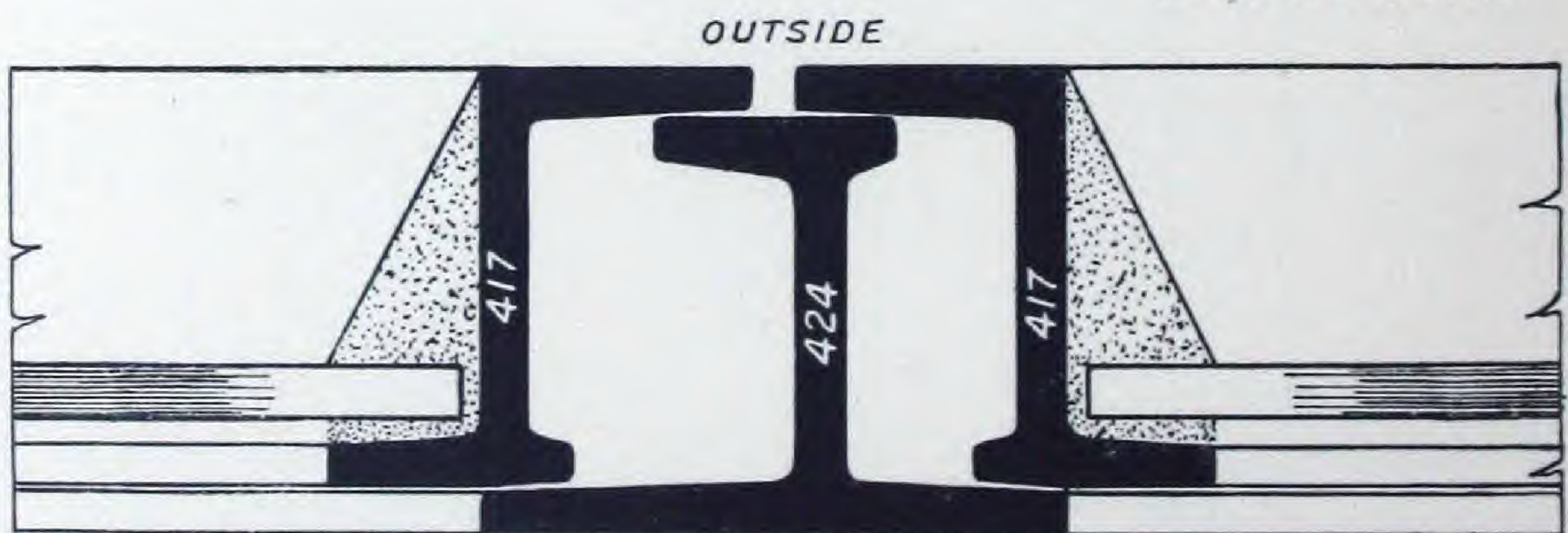
SECTION THRO' MULLION
TO TYPES AS R6224



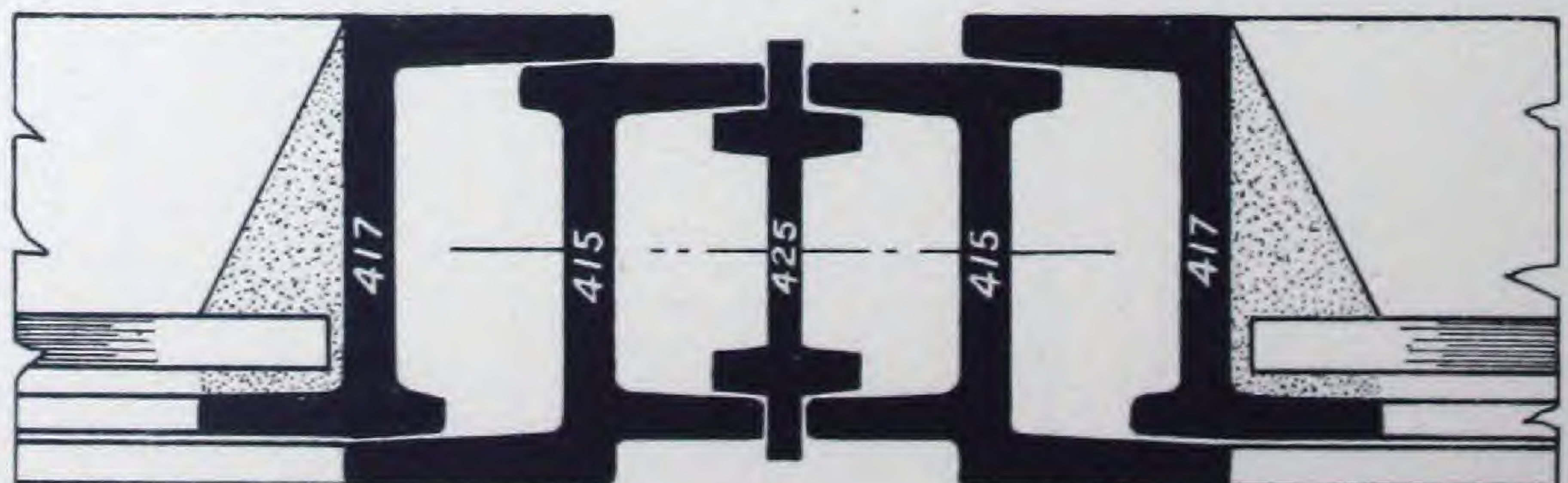
SECTION THRO'
FAST-LIGHT



SECTION THRO'
COUPLED TRANSOME

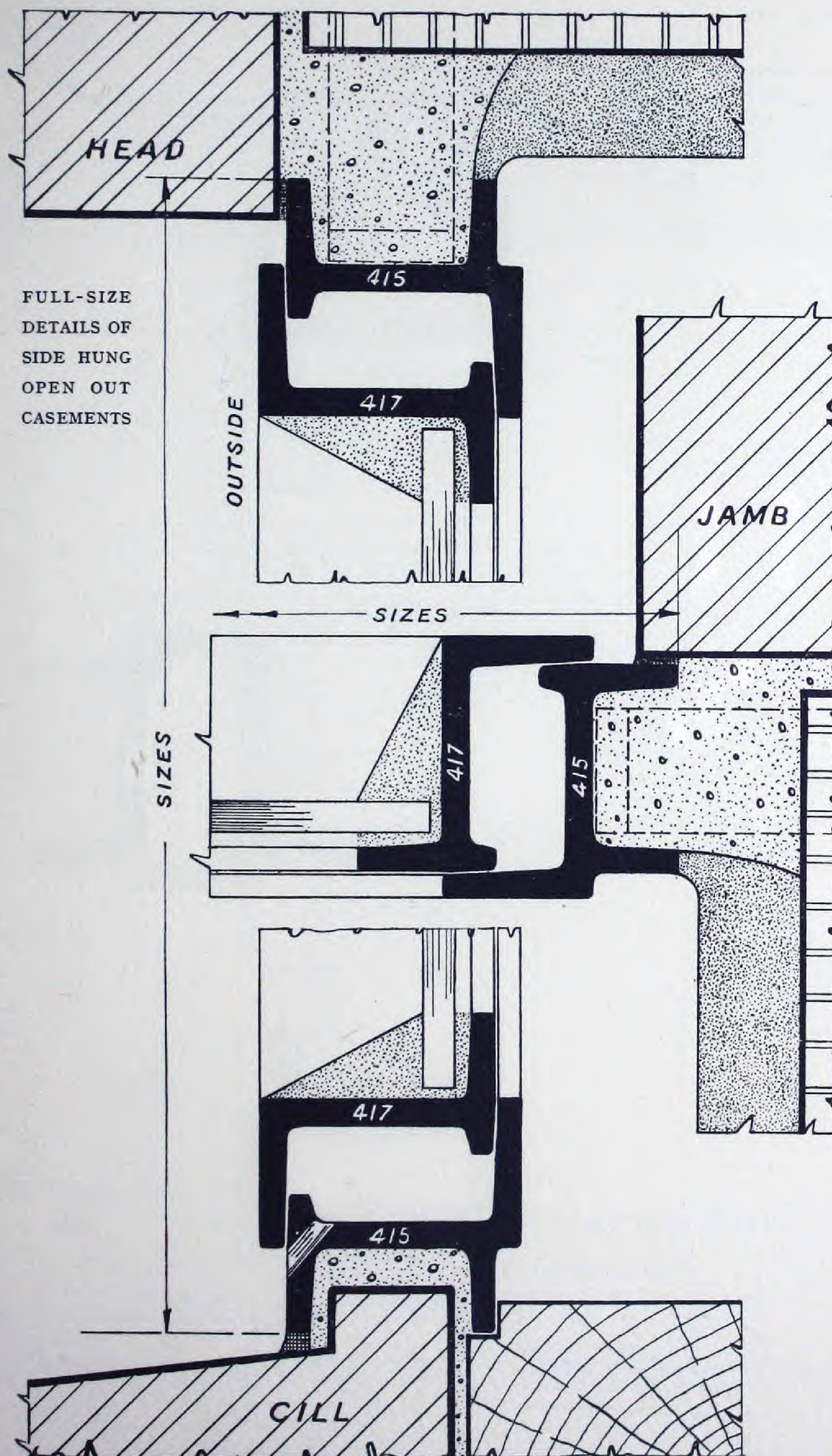


SECTION THRO' MEETING RAIL.
TO DOUBLE SIDE HUNG TYPES

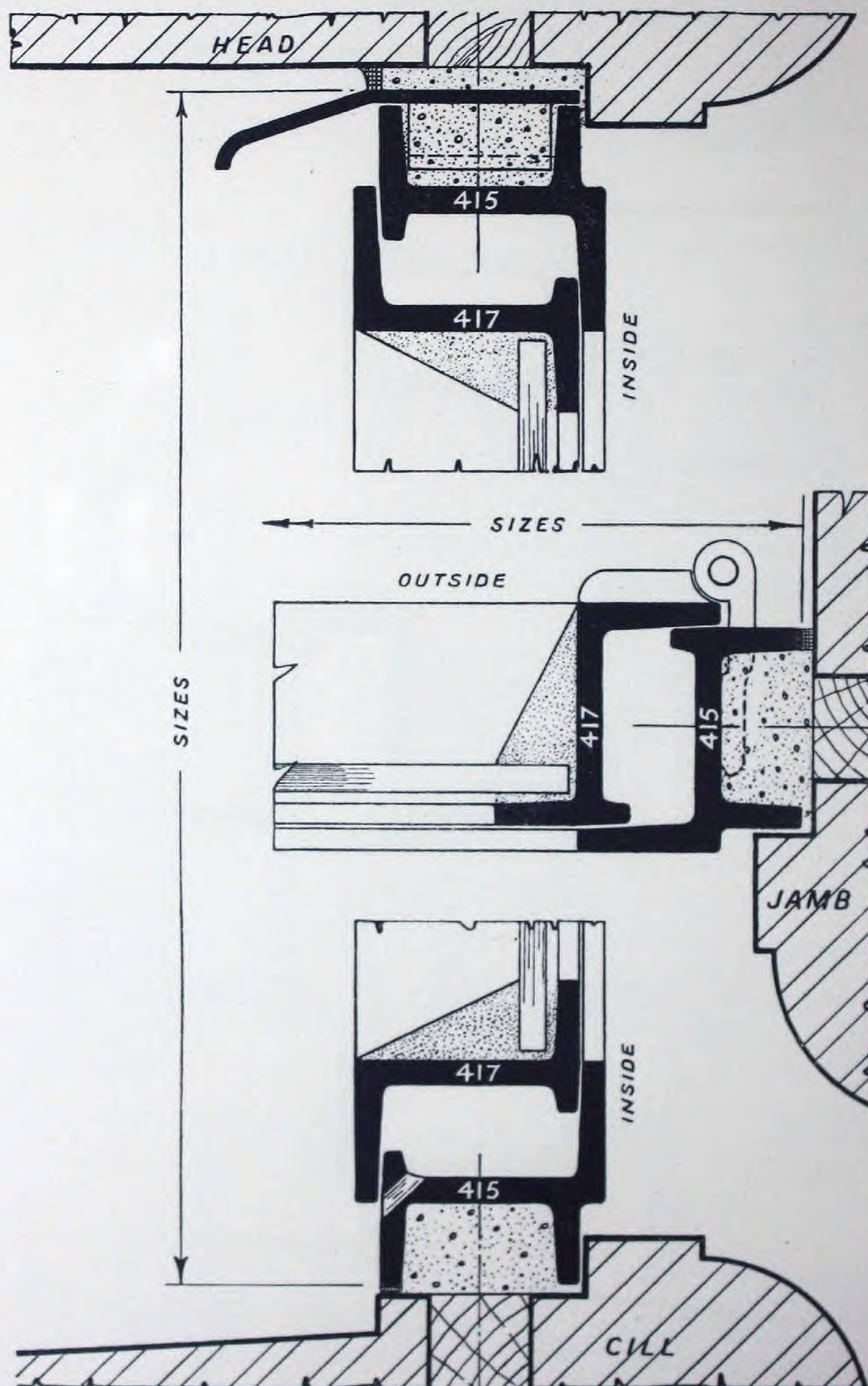


SECTION THRO' COUPLING MULLION

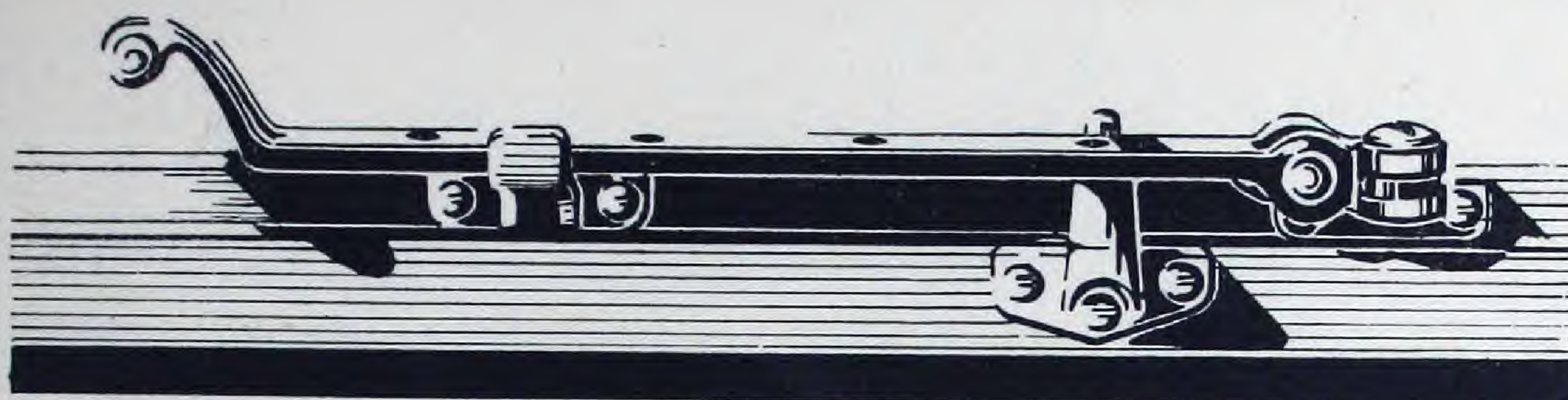
FULL SIZE DETAILS



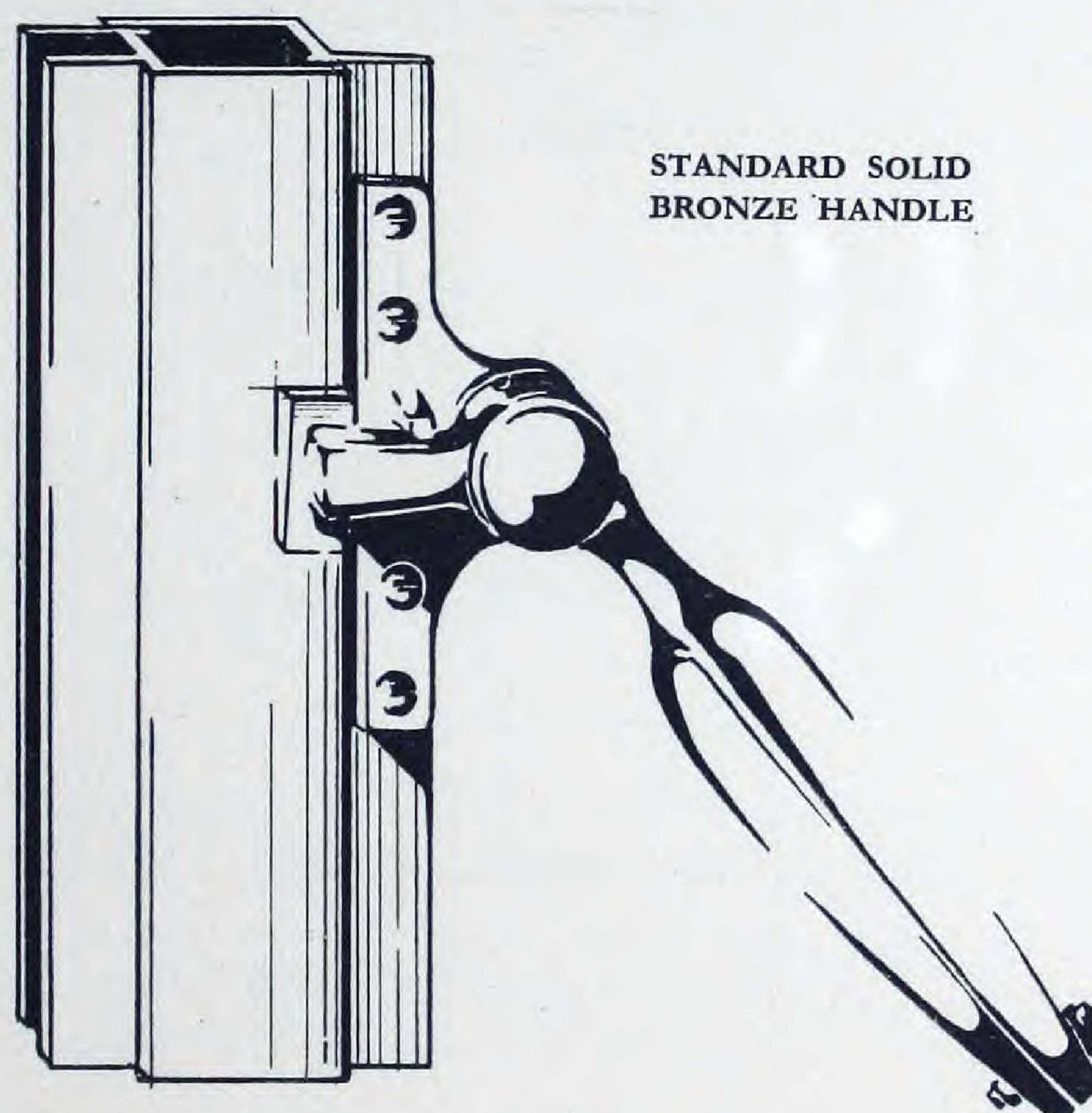
FIXING DETAILS



STANDARD
RELIANCE
FITTINGS



STANDARD RELIANCE SOLID BRONZE PEG STAY



STANDARD SOLID
BRONZE HANDLE



STANDARD RELIANCE BRONZE SLIDING STAY
SUPPLIED AT SMALL EXTRA COST.

GLAZING SIZES

| TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width | TYPE | No. of Panels | Height | Width |
|--------|------------------|--|------------------------------|---------|------------------|---|---|----------------------------------|------------------|--------------------------------|--------------------------------|
| R61 | 2 4 | in. 11 $\frac{5}{16}$ 11 $\frac{5}{16}$ | in. 8 $\frac{5}{16}$ 9 | R12 | 2 | ft. in. 0 11 $\frac{1}{8}$ | ft. in. 0 8 $\frac{1}{2}$ | NR22 | 1 | ft. in. 1 10 $\frac{9}{16}$ | ft. in. 1 4 $\frac{15}{16}$ |
| R62 | 4 8 | 11 $\frac{1}{8}$ 11 $\frac{1}{8}$ | 8 $\frac{5}{16}$ 9 | R1212 | 2 | 0 11 $\frac{1}{8}$ | 0 8 $\frac{1}{2}$ | NR2214 | 1 | 1 10 $\frac{9}{16}$ | 1 4 $\frac{15}{16}$ |
| R6224 | 8 4 | 11 $\frac{1}{8}$ 11 $\frac{13}{16}$ | 8 $\frac{5}{16}$ 9 | R1313 | 3 | 0 11 $\frac{1}{16}$ | 0 8 $\frac{1}{2}$ | NR2316 | 1 | 2 9 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ |
| R6326 | 12 4 2 | 11 $\frac{1}{16}$ 11 $\frac{3}{4}$ 11 $\frac{1}{16}$ | 8 $\frac{5}{16}$ 9 9 | R1414 | 4 | 0 11 | 0 8 $\frac{1}{2}$ | NR2418 | 1 | 3 9 $\frac{1}{16}$ | 1 4 $\frac{15}{16}$ |
| R6428 | 16 4 4 | 11 11 $\frac{11}{16}$ 11 | 8 $\frac{5}{16}$ 9 9 | R1515 | 5 | 0 11 | 0 8 $\frac{1}{2}$ | NR25110 | 1 | 4 8 $\frac{5}{16}$ | 1 4 $\frac{15}{16}$ |
| R65210 | 20 4 6 | 11 11 $\frac{11}{16}$ 11 | 8 $\frac{5}{16}$ 9 9 | NR61 | 2 1 | 0 11 $\frac{5}{16}$ 0 11 $\frac{5}{16}$ | 1 5 $\frac{5}{8}$ 1 6 $\frac{5}{16}$ | NR12 | 1 | 1 10 $\frac{9}{16}$ | 0 8 $\frac{1}{2}$ |
| TR41 | 2 2 | 8 $\frac{1}{16}$ 8 $\frac{1}{16}$ | 8 $\frac{5}{16}$ 9 | NR62 | 2 1 | 1 10 $\frac{9}{16}$ 1 10 $\frac{9}{16}$ | 1 5 $\frac{5}{8}$ 1 6 $\frac{5}{16}$ | NR1212 | 1 | 1 10 $\frac{9}{16}$ | 0 8 $\frac{1}{2}$ |
| R41 | 2 2 | 11 $\frac{5}{16}$ 11 $\frac{5}{16}$ | 8 $\frac{5}{16}$ 9 | NR6224 | 2 1 | 1 10 $\frac{9}{16}$ 1 11 $\frac{15}{16}$ | 1 4 $\frac{15}{16}$ 1 6 $\frac{5}{16}$ | NR1313 | 1 | 2 9 $\frac{13}{16}$ | 0 8 $\frac{1}{2}$ |
| R42 | 4 4 | 11 $\frac{1}{8}$ 11 $\frac{1}{8}$ | 8 $\frac{5}{16}$ 9 | NR6326 | 2 1 | 2 9 $\frac{13}{16}$ 2 11 $\frac{3}{16}$ | 1 4 $\frac{15}{16}$ 1 6 $\frac{5}{16}$ | NR1414 | 1 | 3 9 $\frac{1}{16}$ | 0 8 $\frac{1}{2}$ |
| R4224 | 8 | 11 $\frac{1}{8}$ | 8 $\frac{5}{16}$ | NR6428 | 2 1 | 3 9 $\frac{1}{16}$ 3 10 $\frac{7}{16}$ | 1 4 $\frac{15}{16}$ 1 6 $\frac{5}{16}$ | NR1515 | 1 | 4 8 $\frac{5}{16}$ | 0 8 $\frac{1}{2}$ |
| R4326 | 12 | 11 $\frac{1}{16}$ | 8 $\frac{5}{16}$ | NR65210 | 2 1 | 4 8 $\frac{5}{16}$ 4 9 $\frac{1}{16}$ | 1 4 $\frac{15}{16}$ 1 6 $\frac{5}{16}$ | SR45210 | 8 | 1 1 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ |
| R4428 | 16 | 11 | 8 $\frac{5}{16}$ | NTR41 | 2 | 0 8 $\frac{1}{16}$ | 1 5 $\frac{5}{8}$ | SR4428 | 6 | 1 2 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ |
| R45210 | 20 | 11 | 8 $\frac{5}{16}$ | NR41 | 2 | 0 11 $\frac{5}{16}$ | 1 5 $\frac{5}{8}$ | SR4326 | 4 | 1 4 $\frac{3}{4}$ | 1 4 $\frac{15}{16}$ |
| TR21 | 2 | 8 $\frac{1}{16}$ | 8 $\frac{5}{16}$ | NR42 | 2 | 1 10 $\frac{9}{16}$ | 1 5 $\frac{5}{8}$ | SR25110 | 4 | 1 1 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ |
| R21 | 2 | 11 $\frac{5}{16}$ | 8 $\frac{5}{16}$ | NR4224 | 2 | 1 10 $\frac{9}{16}$ | 1 4 $\frac{15}{16}$ | SR2418 | 3 | 1 2 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ |
| R22 | 4 | 11 $\frac{1}{8}$ | 8 $\frac{5}{16}$ | NR4326 | 2 | 2 9 $\frac{13}{16}$ | 1 4 $\frac{15}{16}$ | SR2316 | 2 | 1 4 $\frac{3}{4}$ | 1 4 $\frac{15}{16}$ |
| R2214 | 4 | 11 $\frac{1}{8}$ | 8 $\frac{5}{16}$ | NR4428 | 2 | 3 9 $\frac{1}{16}$ | 1 4 $\frac{15}{16}$ | SR1515 | 4 | 1 1 $\frac{13}{16}$ | 0 8 $\frac{1}{2}$ |
| R2316 | 6 | 11 $\frac{1}{16}$ | 8 $\frac{5}{16}$ | NR45210 | 2 | 4 8 $\frac{5}{16}$ | 1 4 $\frac{15}{16}$ | SR1414 | 3 | 1 2 $\frac{13}{16}$ | 0 8 $\frac{1}{2}$ |
| R2418 | 8 | 11 | 8 $\frac{5}{16}$ | NTR21 | 1 | 0 8 $\frac{1}{16}$ | 1 4 $\frac{15}{16}$ | SR1313 | 2 | 1 4 $\frac{3}{4}$ | 0 8 $\frac{1}{2}$ |
| R25110 | 10 | 11 | 8 $\frac{5}{16}$ | NR21 | 1 | 0 11 $\frac{5}{16}$ | 1 4 $\frac{15}{16}$ | SEMI-HEAD TYPES TO TEMPLATES. | | | |

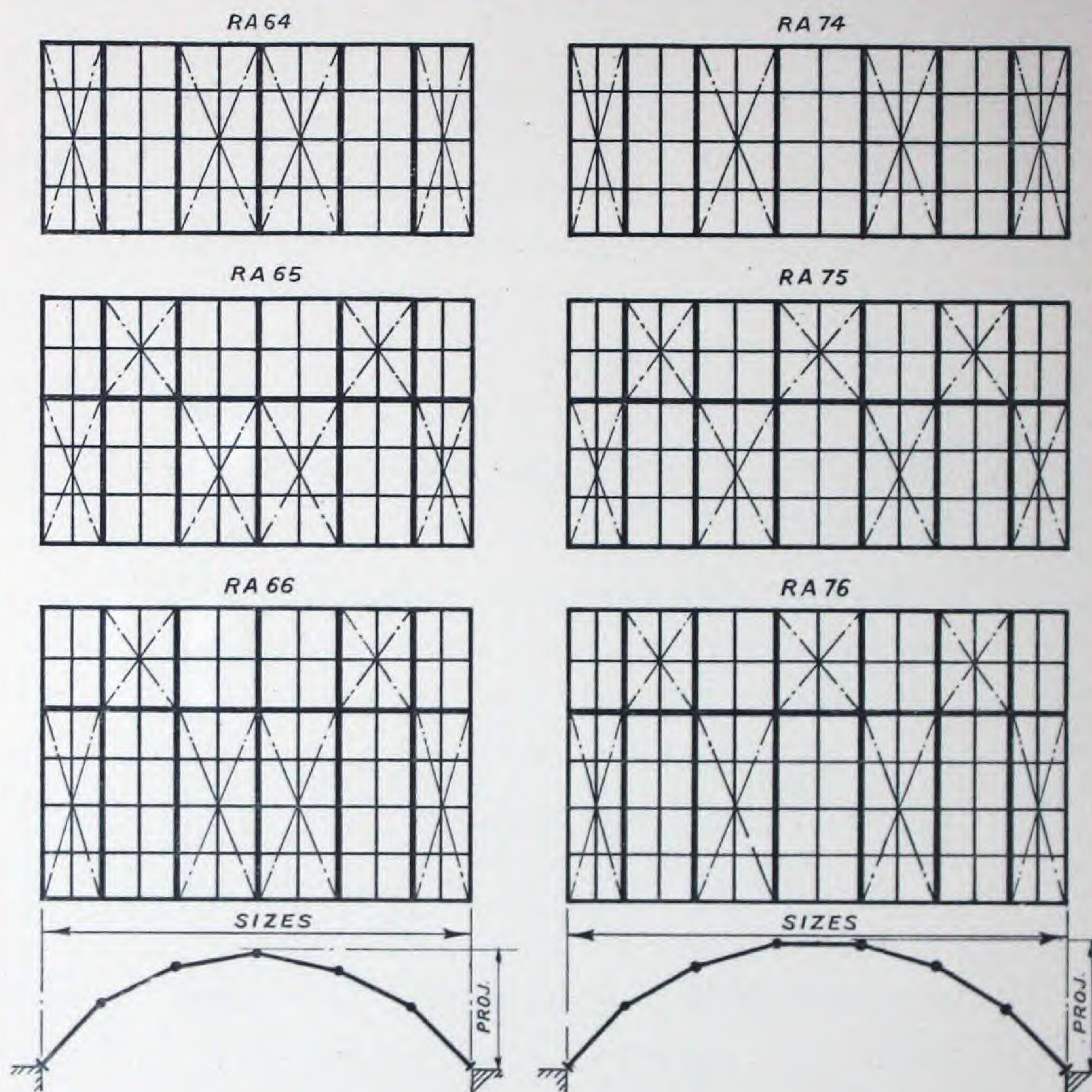
The increasing popularity of Bay Windows has led to the standardisation of Reliance heavy Bays. As in Standard Cottage Casements, Reliance heavy standard units can be built up to form almost any desired type of Bay.

To simplify the ordering of Bay Windows we have designed ranges of the combinations most generally used and a full list of these, together with overall sizes and identification letters is given on pages 70 to 74.

The coupling is formed by means of a tubular Mullion, which ensures a weather-proof joint, and, at the same time, gives a bold appearance to the complete Bay.

For convenience in transport and to eliminate the risk of damage, Bay Windows are despatched unassembled, assembling on the site being a very simple matter by means of the Reliance special coupling bolt.

CIRCULAR BAYS



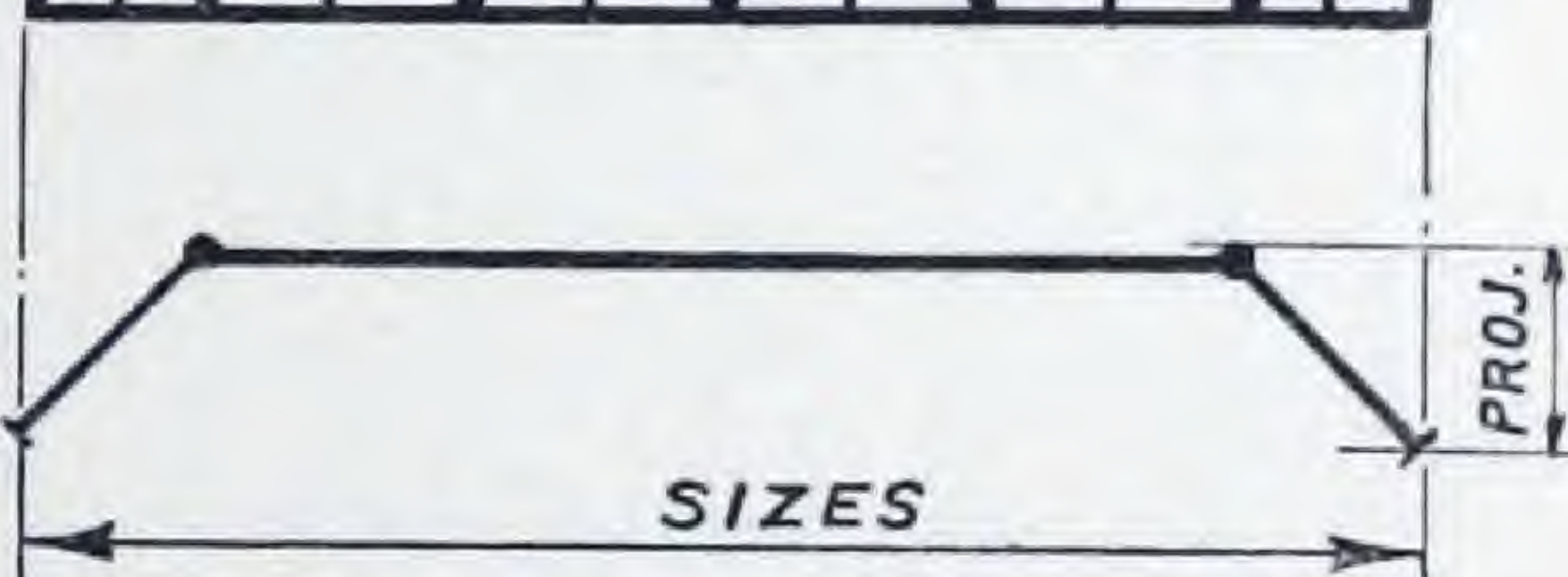
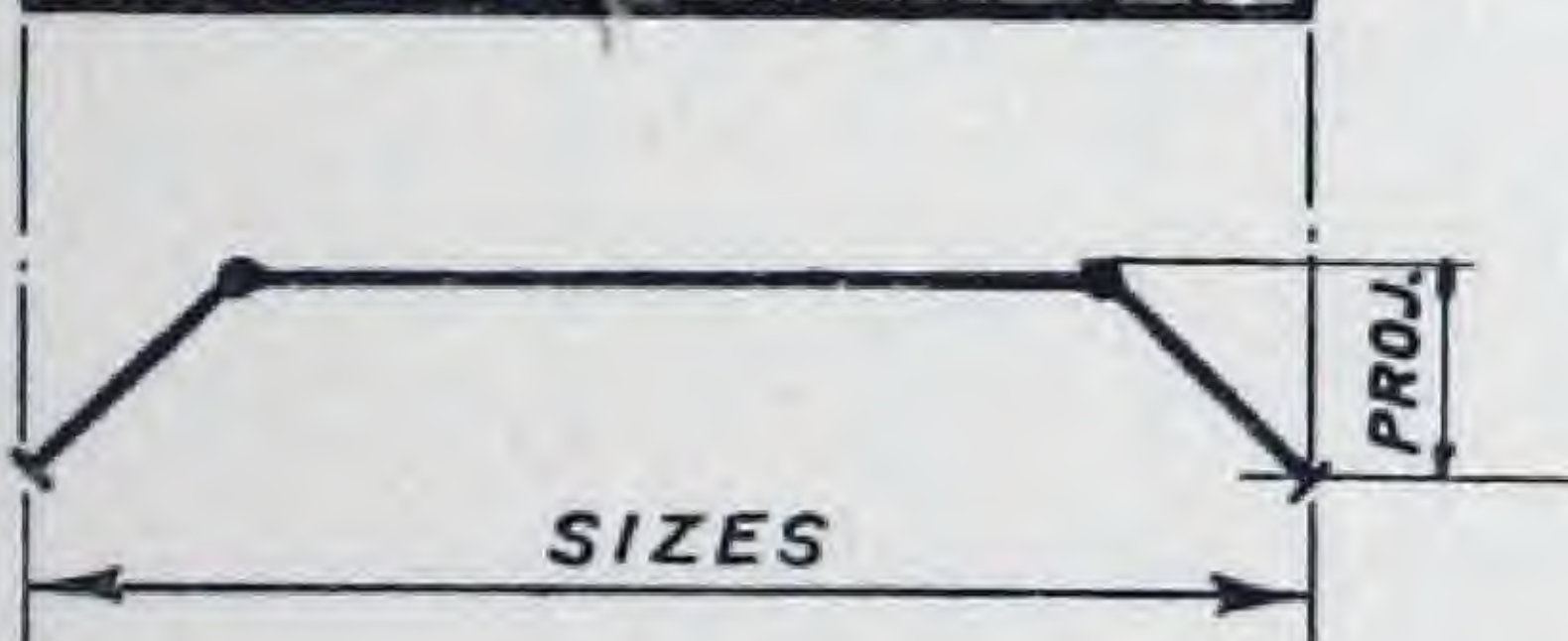
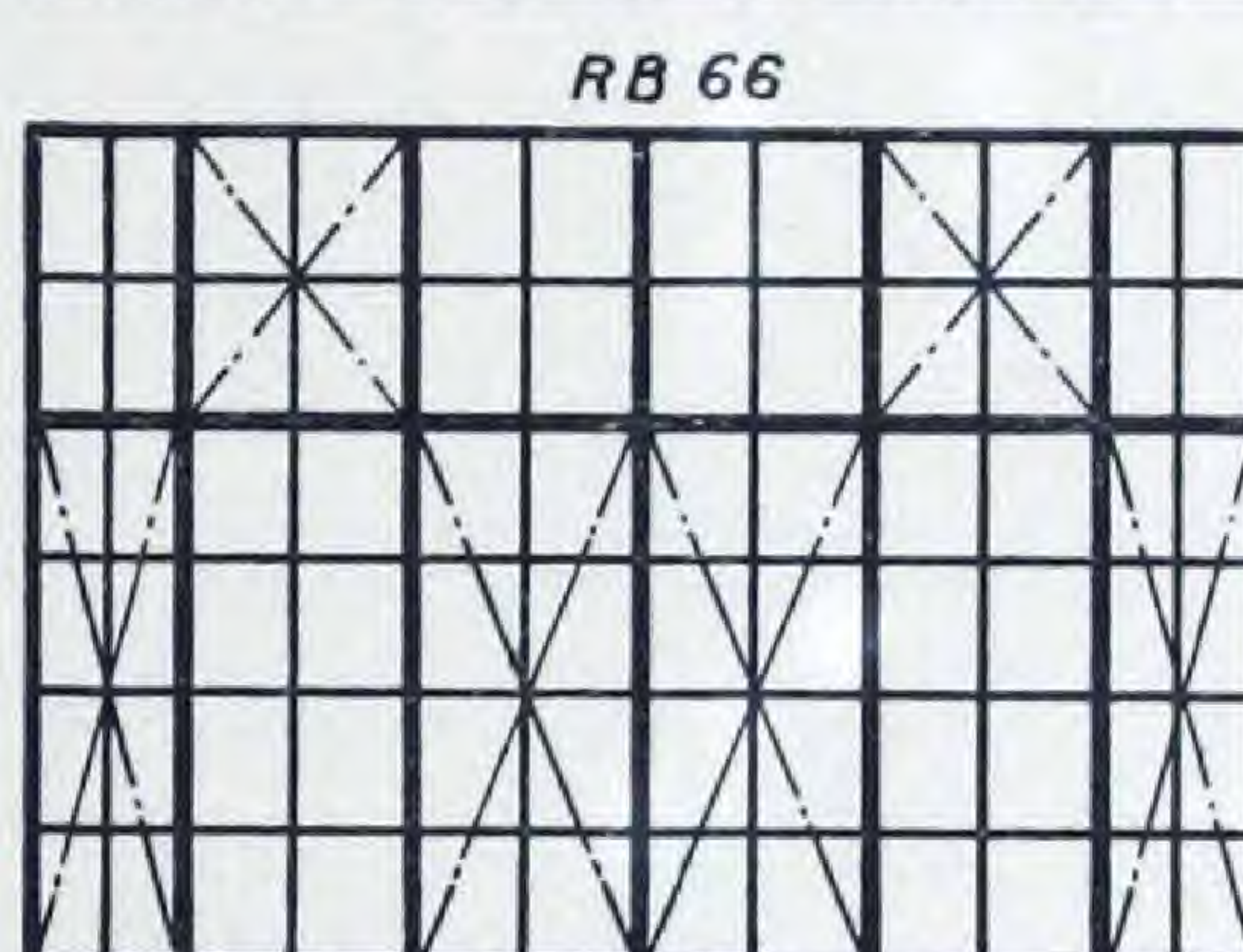
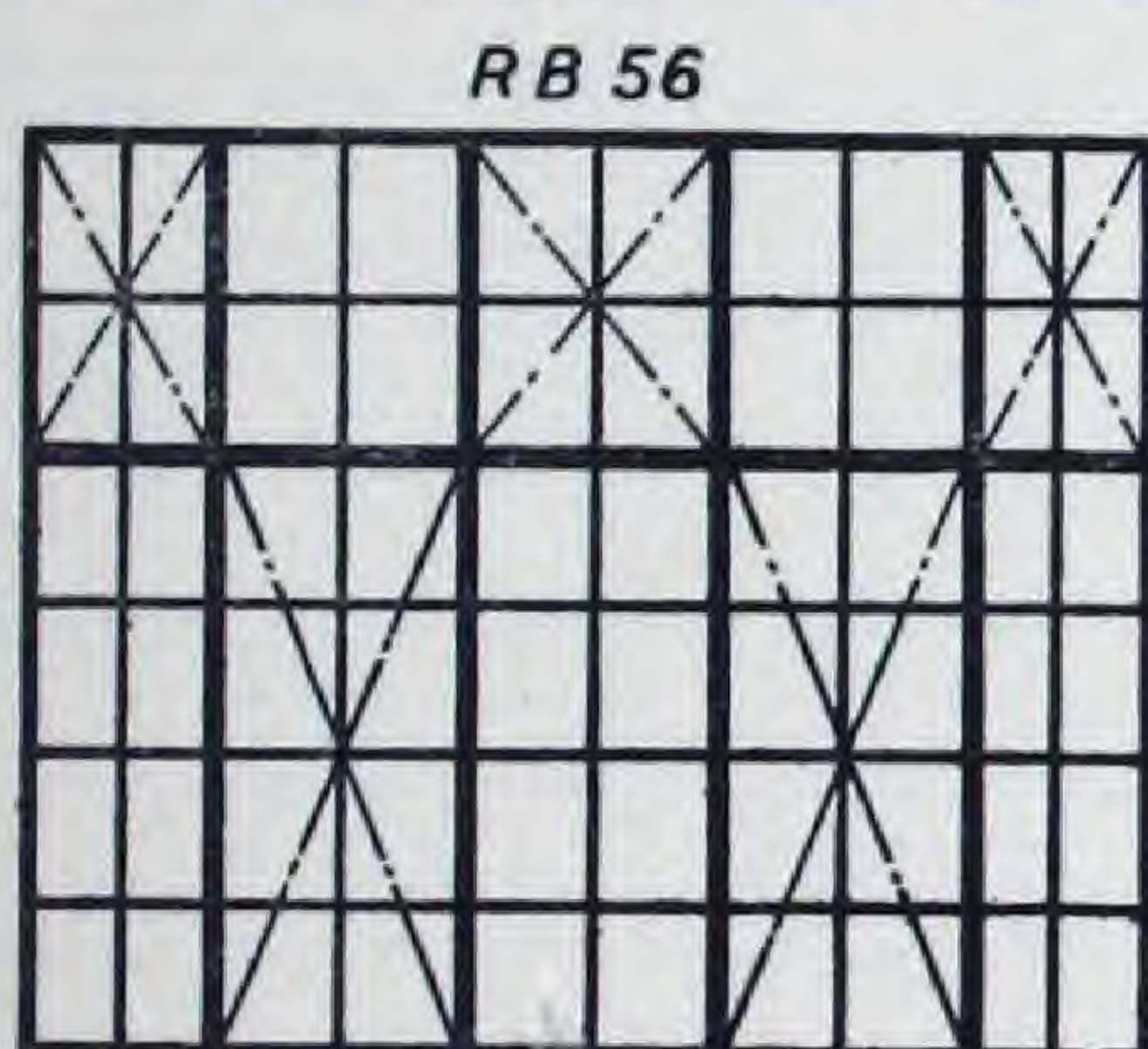
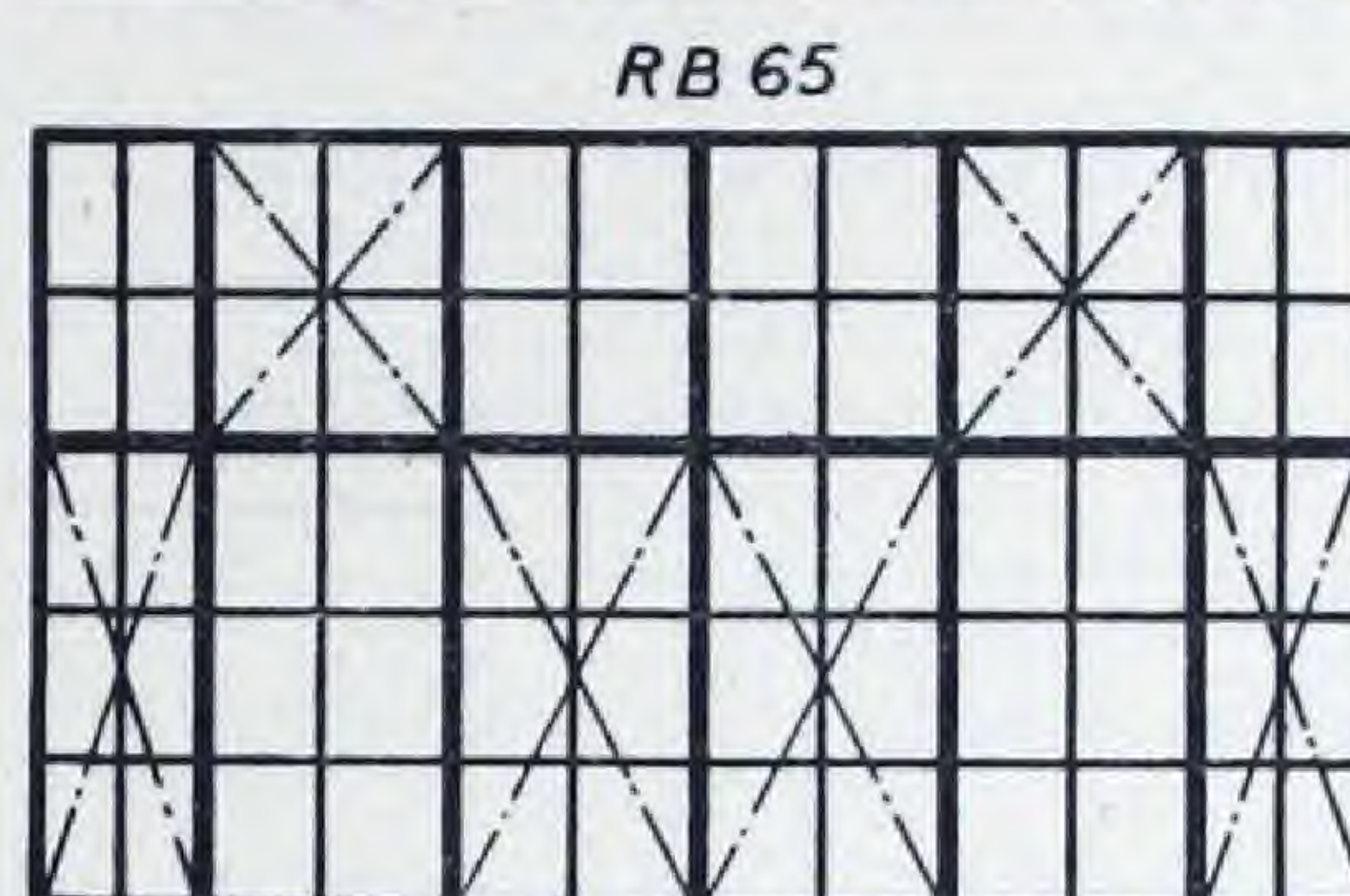
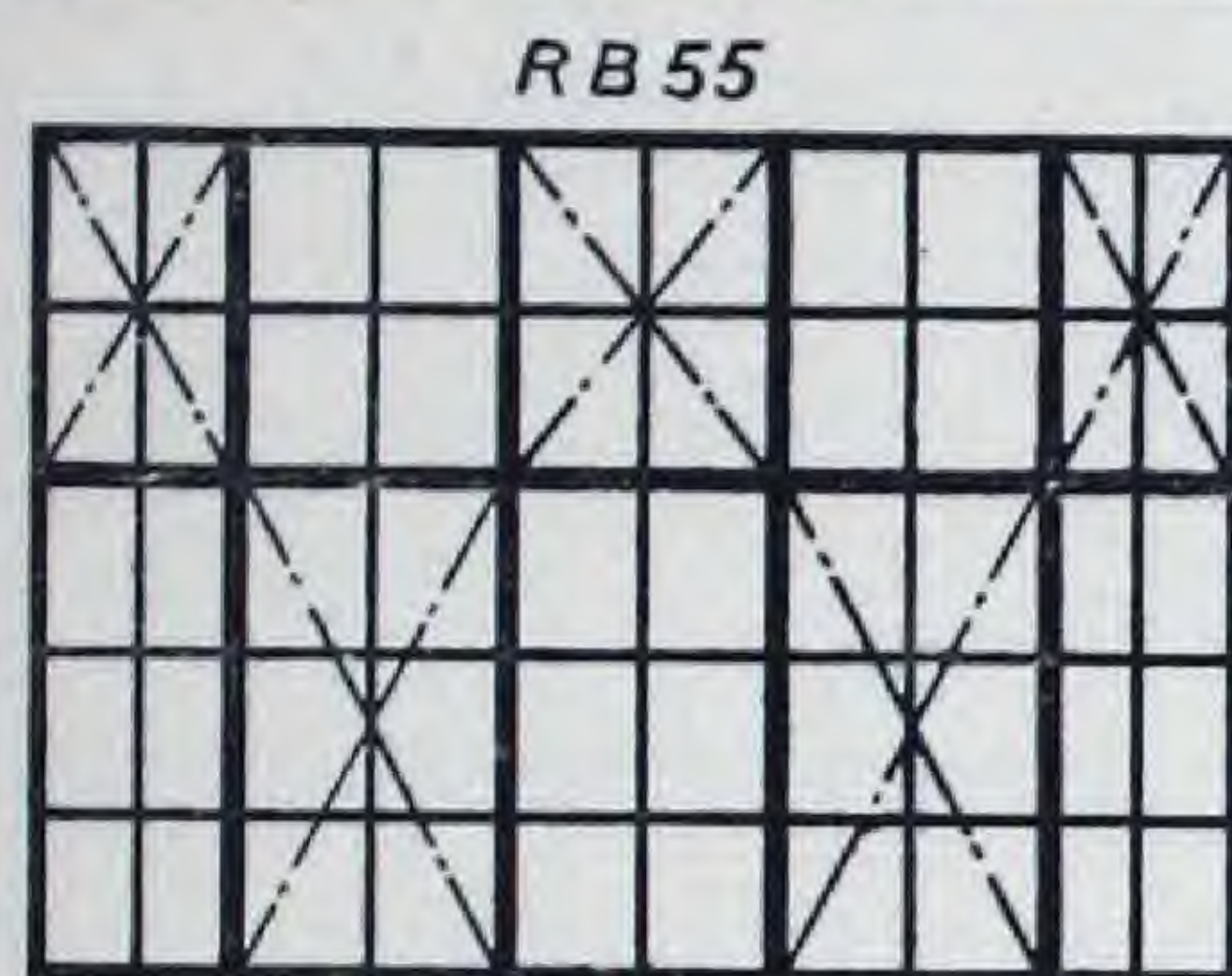
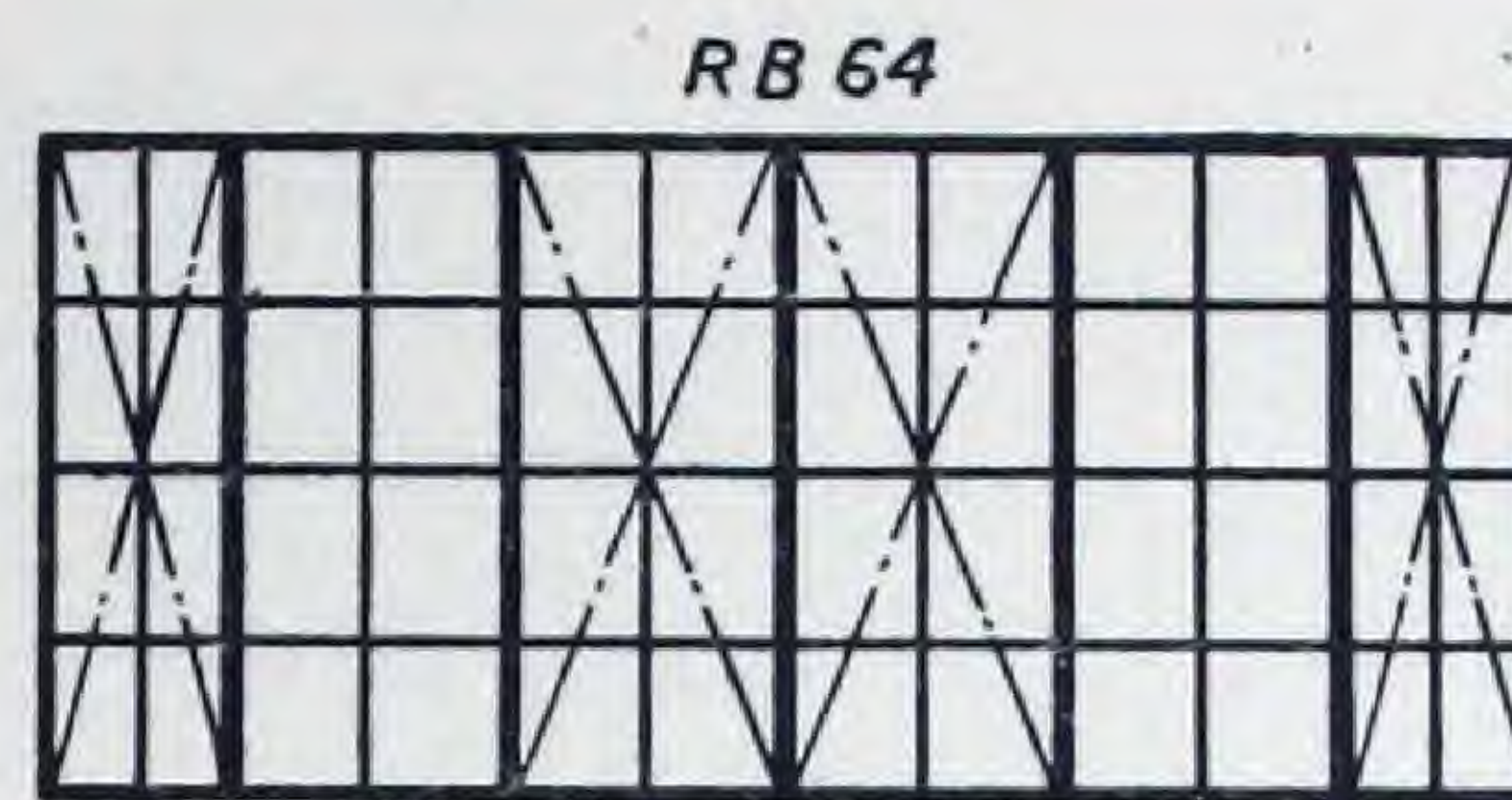
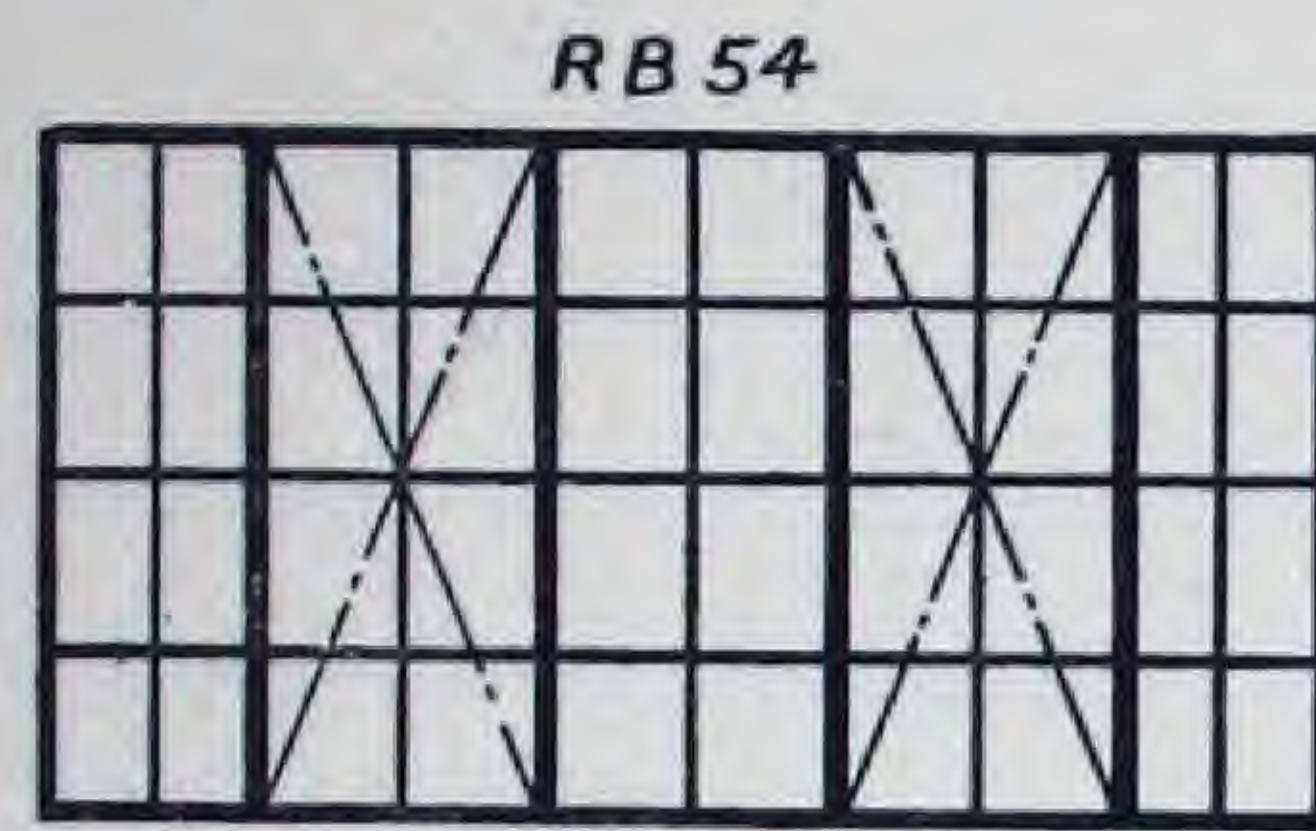
CIRCULAR BAYS

| Type | Lights Wide | Height | Width | Proj. | Type | Lights Wide | Height | Width | Proj. |
|------|-------------|---------------------------|----------------------------|-------------------|------|-------------|-----------------------------|---------------------------|---------------------------|
| RA53 | 5 | ft. 3 in. 0 $\frac{7}{8}$ | ft. 7 in. 7 $\frac{5}{16}$ | ft. 2 in. 0 | RA65 | 6 | ft. 5 in. 2 $\frac{11}{16}$ | ft. 9 in. 0 $\frac{7}{8}$ | ft. 2 in. 6 $\frac{3}{4}$ |
| RA54 | 5 | 4 0 $\frac{1}{8}$ | 7 7 $\frac{5}{16}$ | 2 0 | RA66 | 6 | 6 1 $\frac{11}{16}$ | 9 0 $\frac{7}{8}$ | 2 6 $\frac{3}{4}$ |
| RA55 | 5 | 5 2 $\frac{11}{16}$ | 7 7 $\frac{5}{16}$ | 2 0 | RA73 | 7 | 3 0 $\frac{7}{8}$ | 10 0 $\frac{1}{8}$ | 3 2 $\frac{1}{4}$ |
| RA56 | 5 | 6 1 $\frac{11}{16}$ | 7 7 $\frac{5}{16}$ | 2 0 | RA74 | 7 | 4 0 $\frac{1}{8}$ | 10 0 $\frac{1}{8}$ | 3 2 $\frac{1}{4}$ |
| RA63 | 6 | 3 0 $\frac{7}{8}$ | 9 0 $\frac{7}{8}$ | 2 6 $\frac{3}{4}$ | RA75 | 7 | 5 2 $\frac{11}{16}$ | 10 0 $\frac{1}{8}$ | 3 2 $\frac{1}{4}$ |
| RA64 | 6 | 4 0 $\frac{1}{8}$ | 9 0 $\frac{7}{8}$ | 2 6 $\frac{3}{4}$ | RA76 | 7 | 6 1 $\frac{11}{16}$ | 10 0 $\frac{1}{8}$ | 3 2 $\frac{1}{4}$ |

NOTE.—For Bays without internal Glazing Bars add the letter "N" to the identification type, e.g., RA5N3.

For easy cleaning Hinges add the letter "X," e.g., RA5N3X.

SPLAYED BAYS

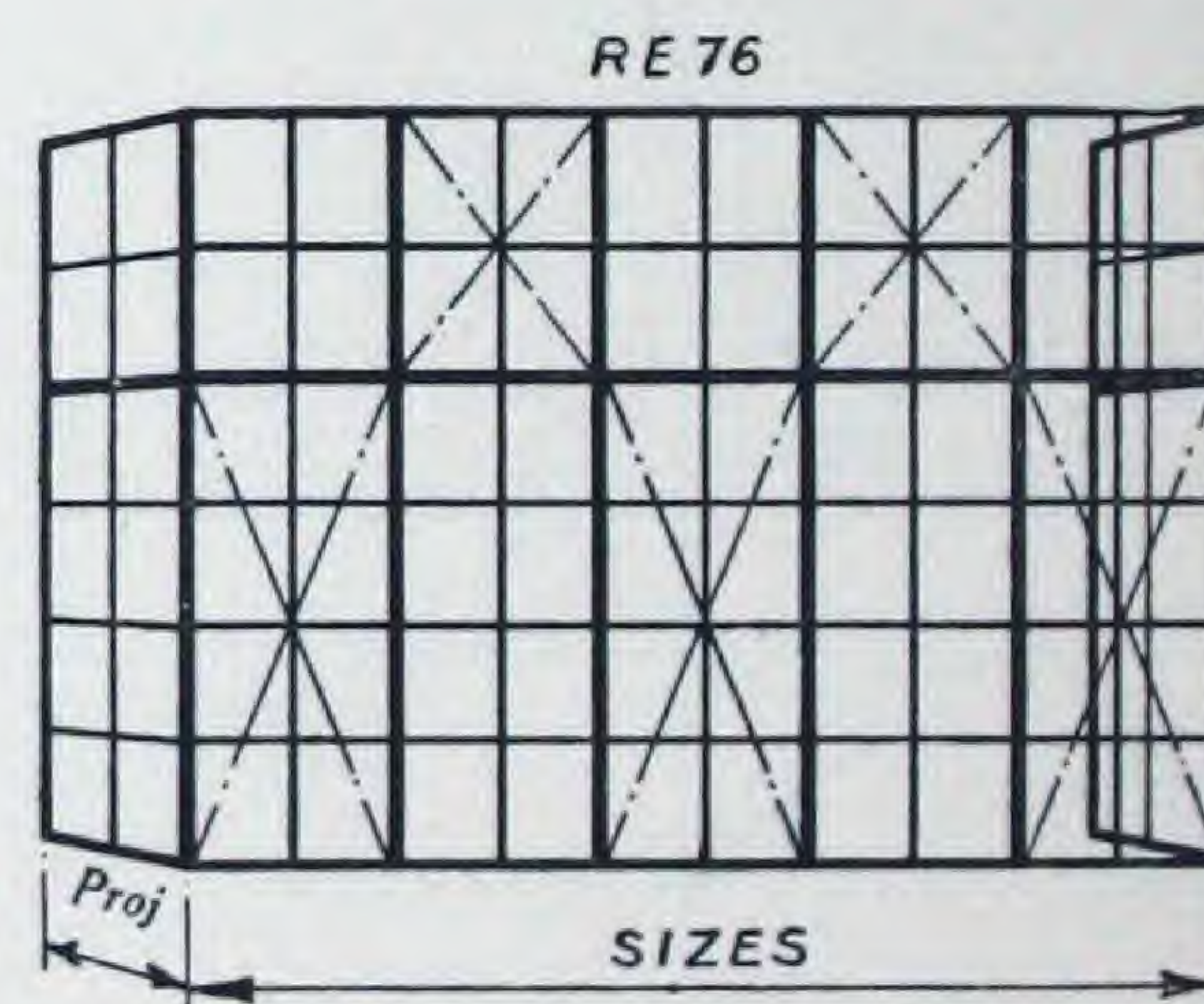
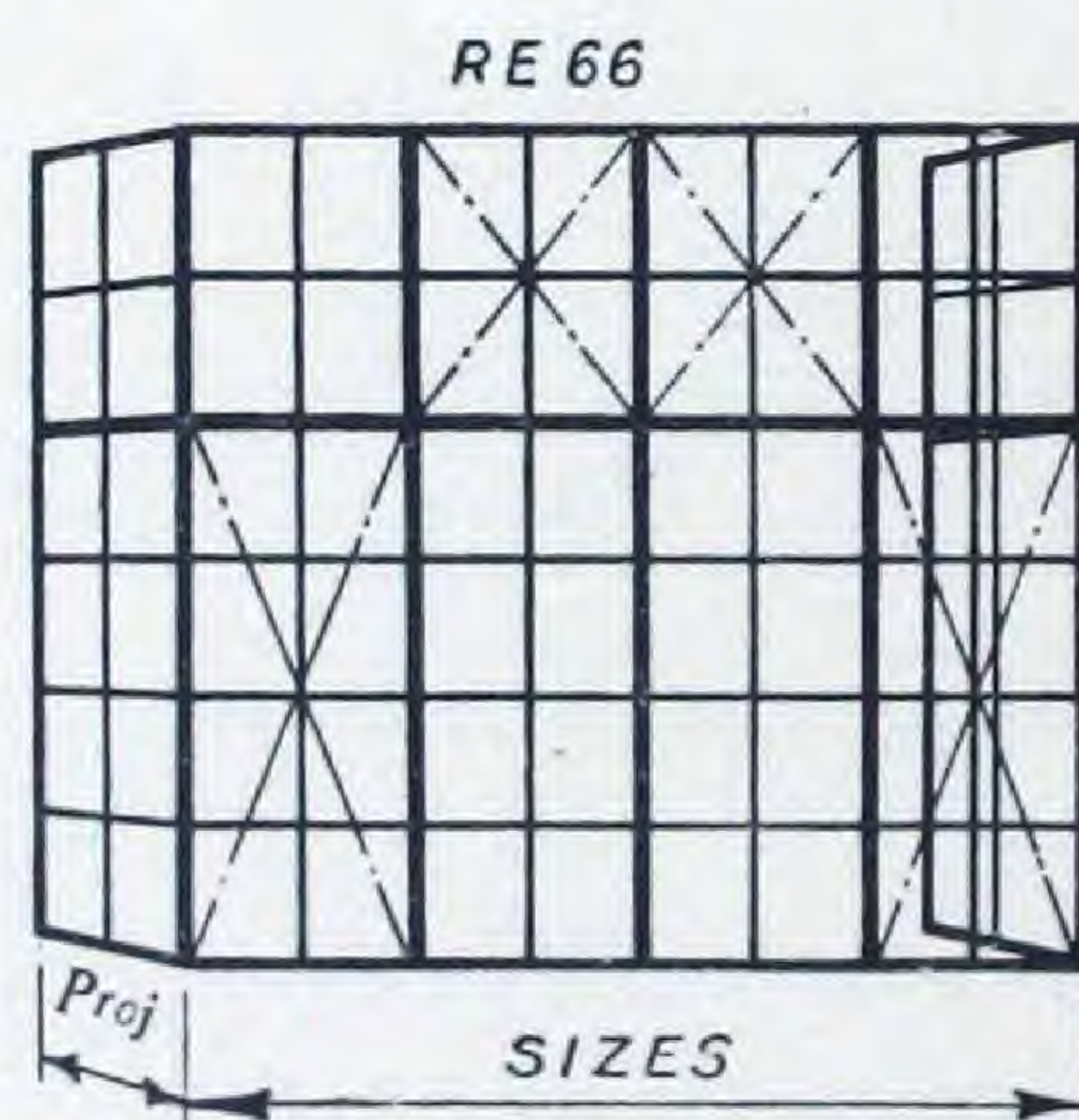
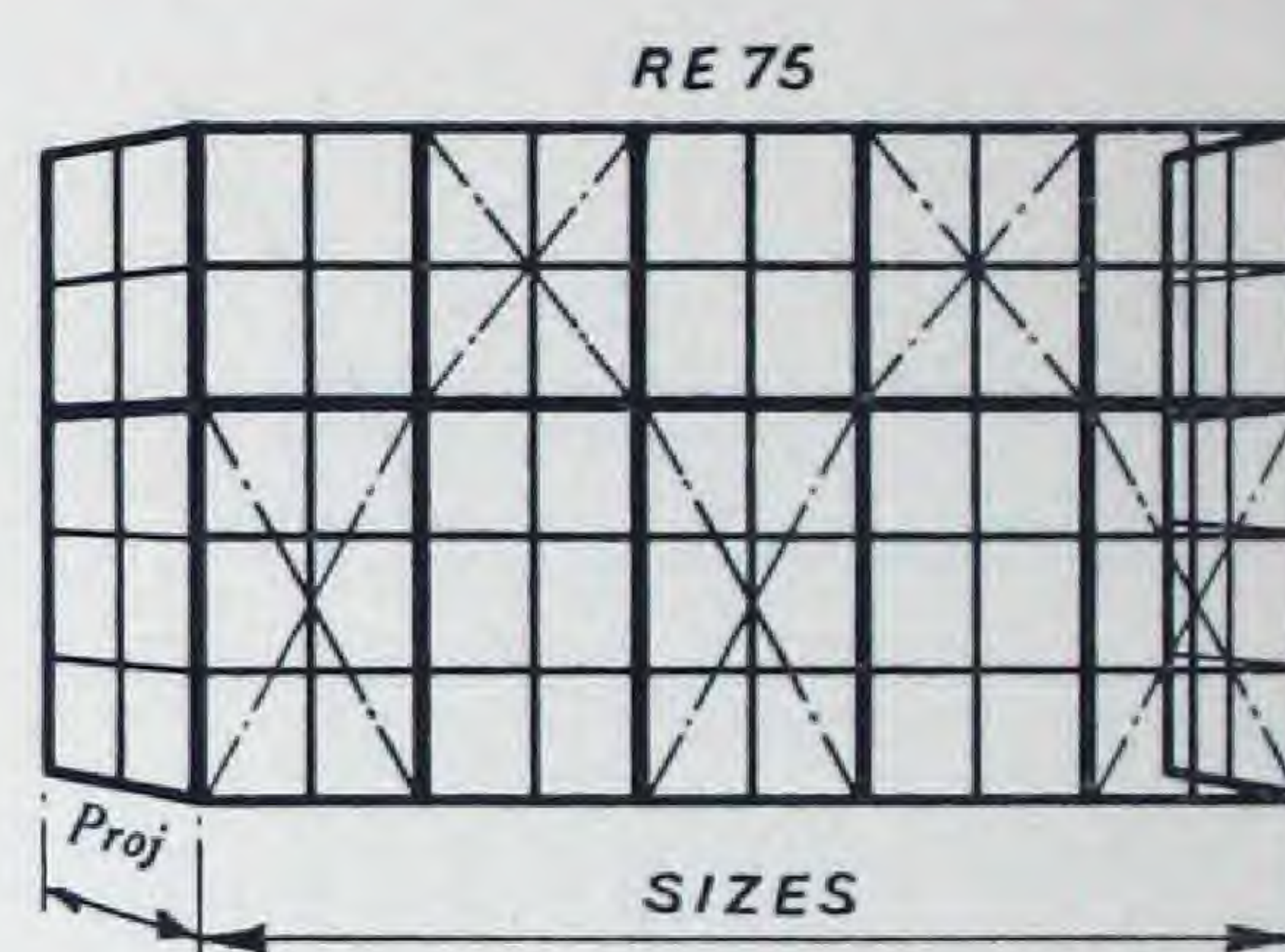
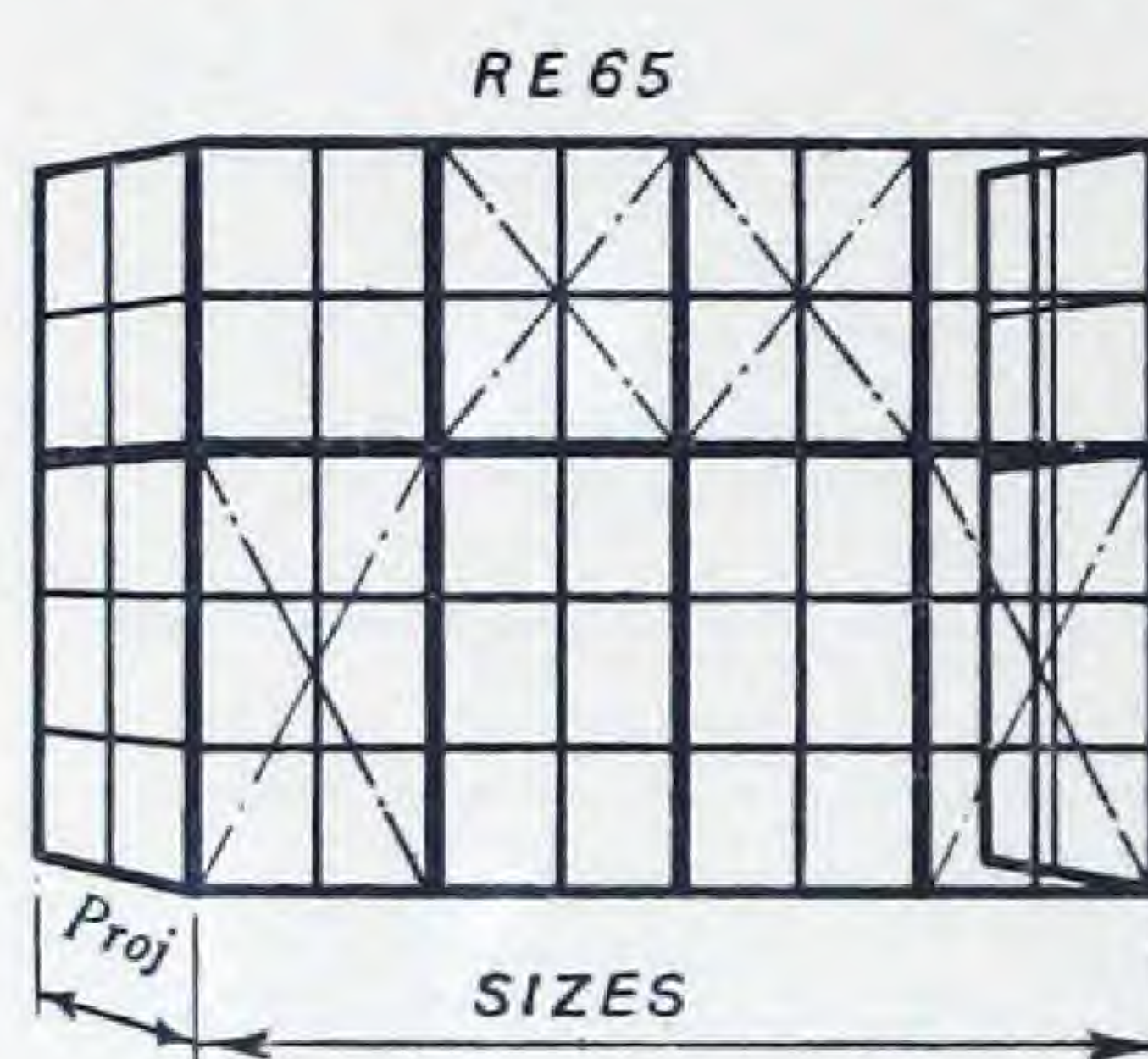
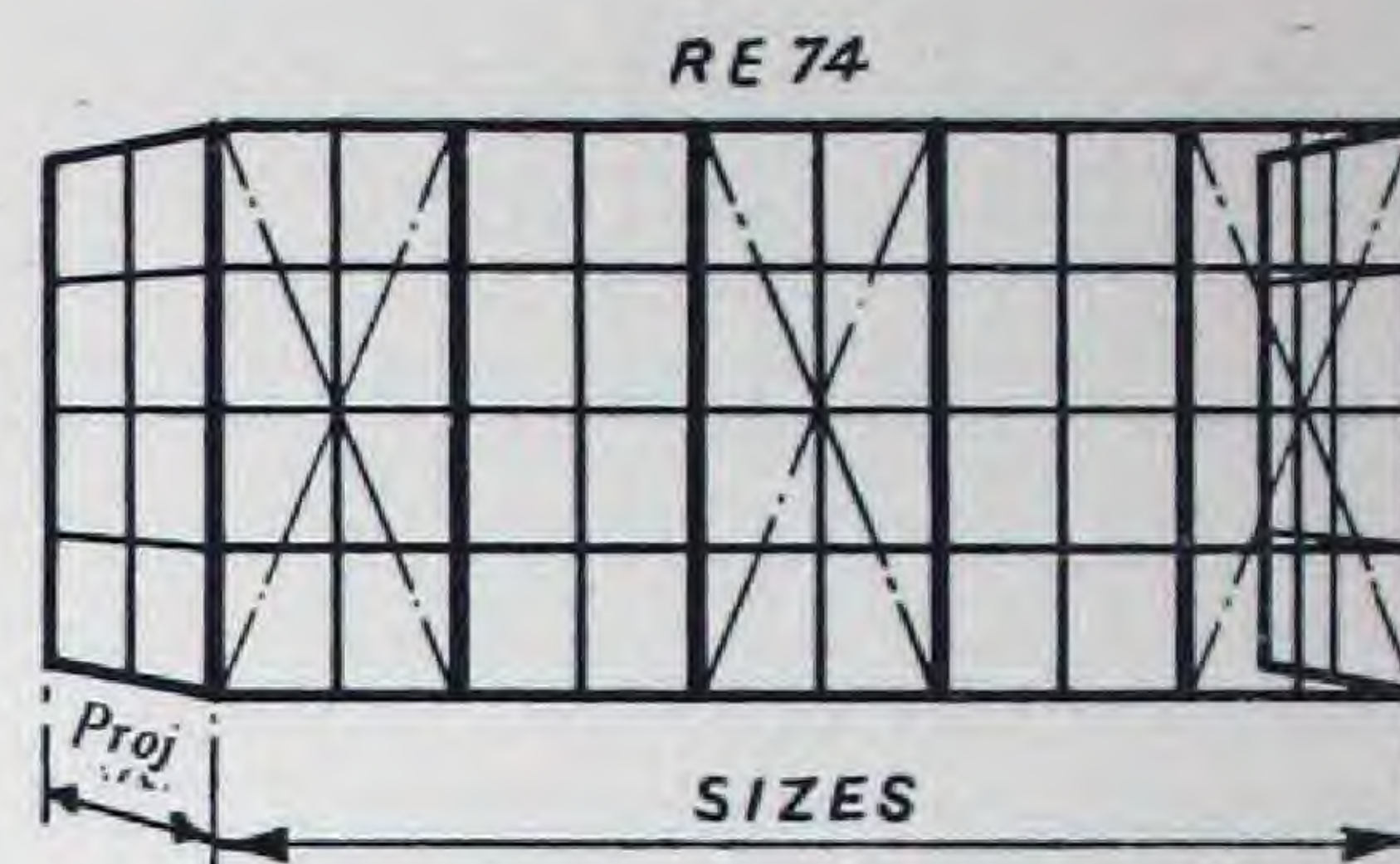
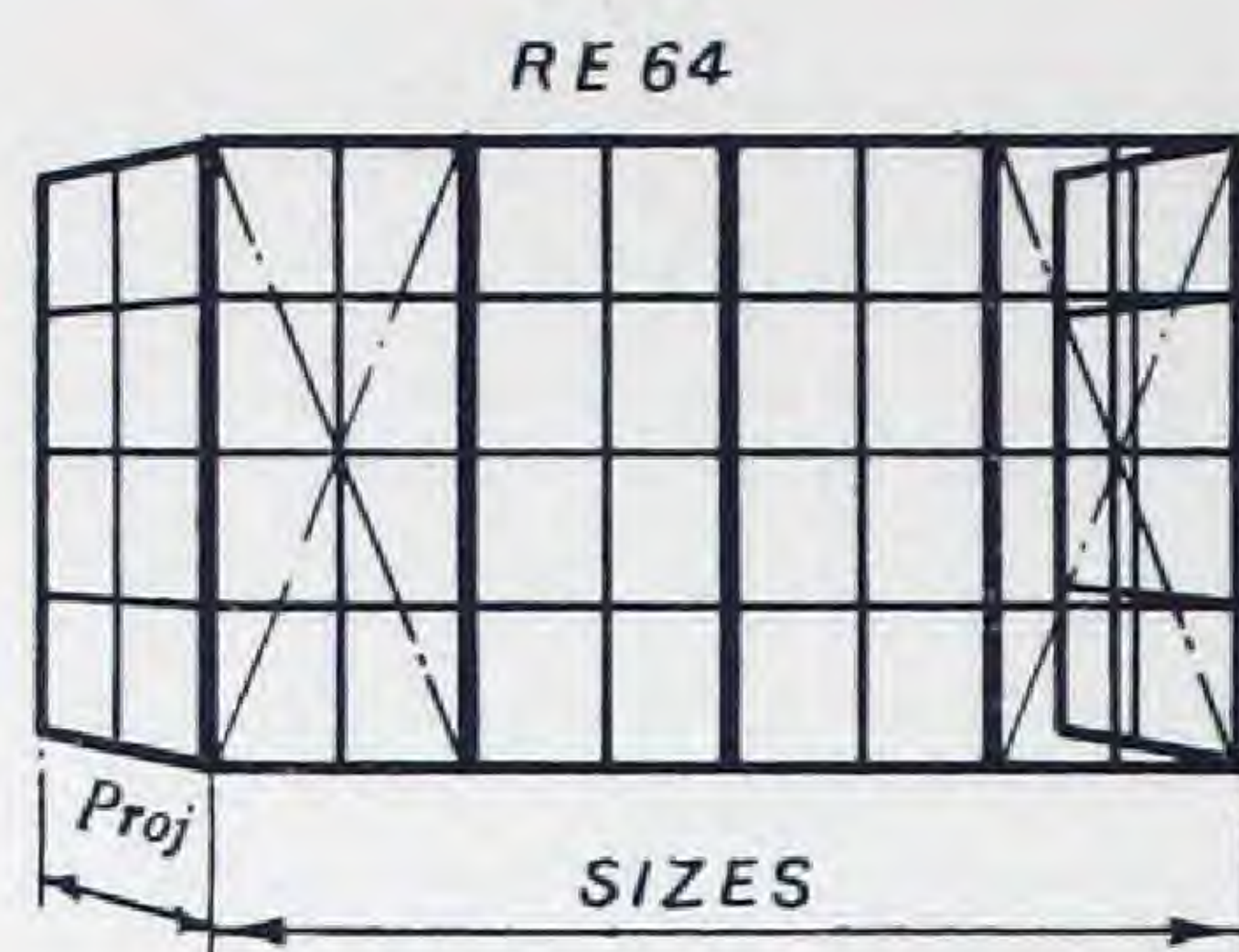


SPLAYED BAYS

| 30° SPLAY | | | | | 45° SPLAY | | | | | 60° SPLAY | | | | |
|-----------|-------------|-----------------------------------|-----------------------------------|--|-----------|-------------|-----------------------------------|-----------------------------------|--|-----------|-------------|-----------------------------------|-----------------------------------|--|
| Type | Lights wide | Height | Width | Proj. | Type | Lights wide | Height | Width | Proj. | Type | Lights wide | Height | Width | Proj. |
| | | ft. ins. | ft. ins. | | | | ft. ins. | ft. ins. | | | | ft. ins. | ft. ins. | |
| RB43 | 4 | 3 0 ⁷ / ₈ | 6 5 ³ / ₈ | ALL PROJECTIONS 10 ¹³ / ₁₆ " | RC43 | 4 | 3 0 ⁷ / ₈ | 5 11 | ALL PROJECTIONS 1' 3 ¹ / ₄ " | RD43 | 4 | 3 0 ⁷ / ₈ | 5 2 ¹ / ₂ | ALL PROJECTIONS 1' 6 ¹¹ / ₁₆ " |
| RB44 | 4 | 4 0 ¹ / ₈ | 6 5 ³ / ₈ | | RC44 | 4 | 4 0 ¹ / ₈ | 5 11 | | RD44 | 4 | 4 0 ¹ / ₈ | 5 2 ¹ / ₂ | |
| RB45 | 4 | 5 2 ¹¹ / ₁₆ | 6 5 ³ / ₈ | | RC45 | 4 | 5 2 ¹¹ / ₁₆ | 5 11 | | RD45 | 4 | 5 2 ¹¹ / ₁₆ | 5 2 ¹ / ₂ | |
| RB46 | 4 | 6 1 ¹⁵ / ₁₆ | 6 5 ³ / ₈ | | RC46 | 4 | 6 1 ¹⁵ / ₁₆ | 5 11 | | RD46 | 4 | 6 1 ¹⁵ / ₁₆ | 5 2 ¹ / ₂ | |
| RB53 | 5 | 3 0 ⁷ / ₈ | 8 0 ¹ / ₂ | | RC53 | 5 | 3 0 ⁷ / ₈ | 7 6 ¹ / ₈ | | RD53 | 5 | 3 0 ⁷ / ₈ | 6 9 ⁵ / ₈ | |
| RB54 | 5 | 4 0 ¹ / ₈ | 8 0 ¹ / ₂ | | RC54 | 5 | 4 0 ¹ / ₈ | 7 6 ¹ / ₈ | | RD54 | 5 | 4 0 ¹ / ₈ | 6 9 ⁵ / ₈ | |
| RB55 | 5 | 5 2 ¹¹ / ₁₆ | 8 0 ¹ / ₂ | | RC55 | 5 | 5 2 ¹¹ / ₁₆ | 7 6 ¹ / ₈ | | RD55 | 5 | 5 2 ¹¹ / ₁₆ | 6 9 ⁵ / ₈ | |
| RB56 | 5 | 6 1 ¹⁵ / ₁₆ | 8 0 ¹ / ₂ | | RC56 | 5 | 6 1 ¹⁵ / ₁₆ | 7 6 ¹ / ₈ | | RD56 | 5 | 6 1 ¹⁵ / ₁₆ | 6 9 ⁵ / ₈ | |
| RB63 | 6 | 3 0 ⁷ / ₈ | 9 8 ¹¹ / ₁₆ | | RC63 | 6 | 3 0 ⁷ / ₈ | 9 2 ⁵ / ₁₆ | | RD63 | 6 | 3 0 ⁷ / ₈ | 8 5 ¹³ / ₁₆ | |
| RB64 | 6 | 4 0 ¹ / ₈ | 9 8 ¹¹ / ₁₆ | | RC64 | 6 | 4 0 ¹ / ₈ | 9 2 ⁵ / ₁₆ | | RD64 | 6 | 4 0 ¹ / ₈ | 8 5 ¹³ / ₁₆ | |
| RB65 | 6 | 5 2 ¹¹ / ₁₆ | 9 8 ¹¹ / ₁₆ | | RC65 | 6 | 5 2 ¹¹ / ₁₆ | 9 2 ⁵ / ₁₆ | | RD65 | 6 | 5 2 ¹¹ / ₁₆ | 8 5 ¹³ / ₁₆ | |
| RB66 | 6 | 6 1 ¹⁵ / ₁₆ | 9 8 ¹¹ / ₁₆ | | RC66 | 6 | 6 1 ¹⁵ / ₁₆ | 9 2 ⁵ / ₁₆ | | RD66 | 6 | 6 1 ¹⁵ / ₁₆ | 8 5 ¹³ / ₁₆ | |
| RB73 | 7 | 3 0 ⁷ / ₈ | 11 4 ⁷ / ₈ | | RC73 | 7 | 3 0 ⁷ / ₈ | 10 10 ¹ / ₂ | | RD73 | 7 | 3 0 ⁷ / ₈ | 10 2 | |
| RB74 | 7 | 4 0 ¹ / ₈ | 11 4 ⁷ / ₈ | | RC74 | 7 | 4 0 ¹ / ₈ | 10 10 ¹ / ₂ | | RD74 | 7 | 4 0 ¹ / ₈ | 10 2 | |
| RB75 | 7 | 5 2 ¹¹ / ₁₆ | 11 4 ⁷ / ₈ | | RC75 | 7 | 5 2 ¹¹ / ₁₆ | 10 10 ¹ / ₂ | | RD75 | 7 | 5 2 ¹¹ / ₁₆ | 10 2 | |
| RB76 | 7 | 6 1 ¹⁵ / ₁₆ | 11 4 ⁷ / ₈ | | RC76 | 7 | 6 1 ¹⁵ / ₁₆ | 10 10 ¹ / ₂ | | RD76 | 7 | 6 1 ¹⁵ / ₁₆ | 10 2 | |

NOTE.—For Bays without Internal Glazing Bars add the letter "N," e.g. RB6N4.
For Easy Cleaning Hinges add the letter "X," e.g. RB73X.

SQUARE BAYS



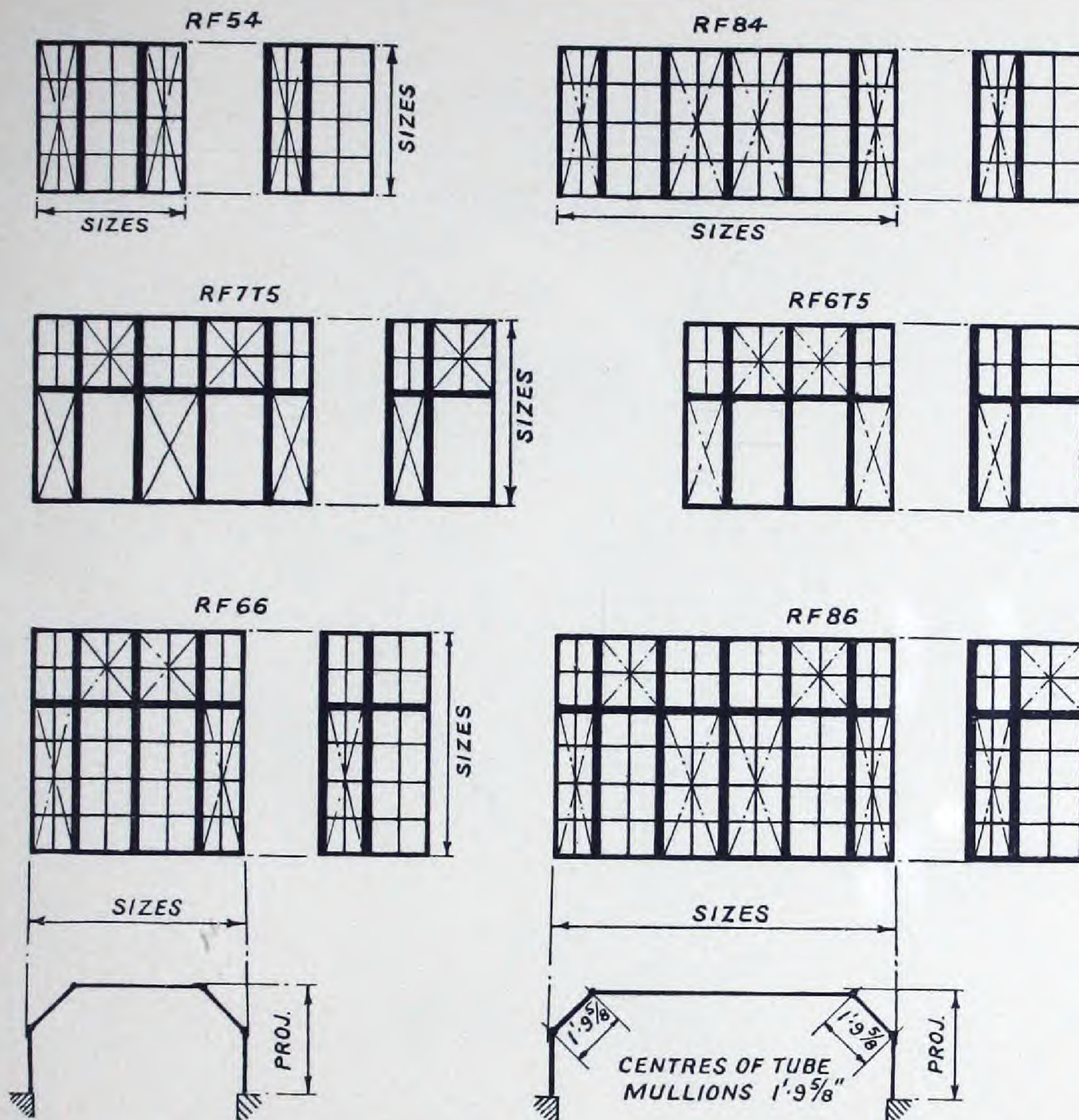
SQUARE BAYS

| Type | Lights Wide | Height | Width | Proj. | Type | Lights Wide | Height | Width | Proj. |
|------|-------------|-----------------------------------|-----------------------------------|--|------|-------------|-----------------------------------|-----------------------------------|--|
| | | ft. ins. | ft. ins. | | | | ft. ins. | ft. ins. | |
| RE53 | 5 | 3 0 ⁷ / ₈ | 5 1 ³ / ₄ | All Projections 1' 9 ³ / ₄ " | RE65 | 6 | 5 2 ¹¹ / ₁₆ | 6 9 ¹⁵ / ₁₆ | All Projections 1' 9 ³ / ₄ " |
| RE54 | 5 | 4 0 ¹ / ₈ | 5 1 ³ / ₄ | | RE66 | 6 | 6 1 ¹⁵ / ₁₆ | 6 9 ¹⁵ / ₁₆ | |
| RE55 | 5 | 5 2 ¹¹ / ₁₆ | 5 1 ³ / ₄ | | RE73 | 7 | 3 0 ⁷ / ₈ | 8 6 ¹ / ₈ | |
| RE56 | 5 | 6 1 ¹⁵ / ₁₆ | 5 1 ³ / ₄ | | RE74 | 7 | 4 0 ¹ / ₈ | 8 6 ¹ / ₈ | |
| RE63 | 6 | 3 0 ⁷ / ₈ | 6 9 ¹⁵ / ₁₆ | | RE75 | 7 | 5 2 ¹¹ / ₁₆ | 8 6 ¹ / ₈ | |
| RE64 | 6 | 4 0 ¹ / ₈ | 6 9 ¹⁵ / ₁₆ | | RE76 | 7 | 6 1 ¹⁵ / ₁₆ | 8 6 ¹ / ₈ | |

NOTE.—For Bays without Internal Glazing Bars add the letter "N," e.g. RE5N3.

For Easy Cleaning Hinges add the letter "X," e.g. RE65X.

SQUARE SPLAYED BAYS



SQUARE SPLAYED BAYS

| Type | Lights Wide | Height | Width | Proj. | Type | Lights Wide | Height | Width | Proj. |
|------|-------------|---|---------------------------------|-----------------------|------|-------------|---|---|-----------------------|
| RF53 | 5 | ft. 3 in. 0 ⁷ / ₈ | ft. 4 in. 6 | All Projections 3' 1" | RF73 | 7 | ft. 3 in. 0 ⁷ / ₈ | ft. 7 in. 8 ¹ / ₄ | All Projections 3' 1" |
| RF54 | 5 | 4 0 ¹ / ₈ | 4 6 | | RF74 | 7 | 4 0 ¹ / ₈ | 7 8 ¹ / ₄ | |
| RF55 | 5 | 5 2 ¹¹ / ₁₆ | 4 6 | | RF75 | 7 | 5 2 ¹¹ / ₁₆ | 7 8 ¹ / ₄ | |
| RF56 | 5 | 6 1 ¹⁵ / ₁₆ | 4 6 | | RF76 | 7 | 6 1 ¹⁵ / ₁₆ | 7 8 ¹ / ₄ | |
| RF63 | 6 | 3 0 ⁷ / ₈ | 6 1 ¹ / ₈ | | RF83 | 8 | 3 0 ⁷ / ₈ | 9 4 ⁷ / ₁₆ | |
| RF64 | 6 | 4 0 ¹ / ₈ | 6 1 ¹ / ₈ | | RF84 | 8 | 4 0 ¹ / ₈ | 9 4 ⁷ / ₁₆ | |
| RF65 | 6 | 5 2 ¹¹ / ₁₆ | 6 1 ¹ / ₈ | | RF85 | 8 | 5 2 ¹¹ / ₁₆ | 9 4 ⁷ / ₁₆ | |
| RF66 | 6 | 6 1 ¹⁵ / ₁₆ | 6 1 ¹ / ₈ | | RF86 | 8 | 6 1 ¹⁵ / ₁₆ | 9 4 ⁷ / ₁₆ | |

NOTE.—For Bays without internal Glazing Bars add the letter "N," e.g., RF6N5.

For easy cleaning Hinges add the letter "X," e.g., RF56X.

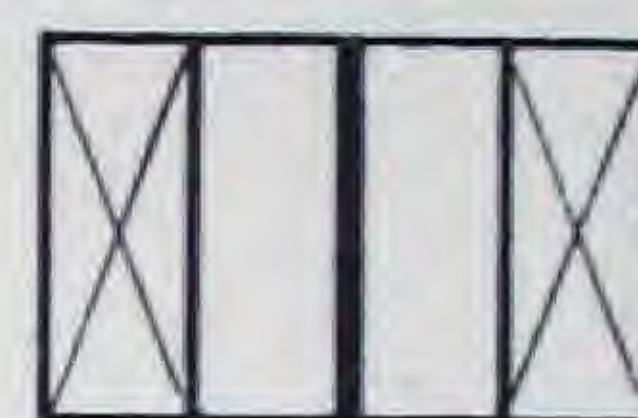
ORIEL BAYS



RG 23



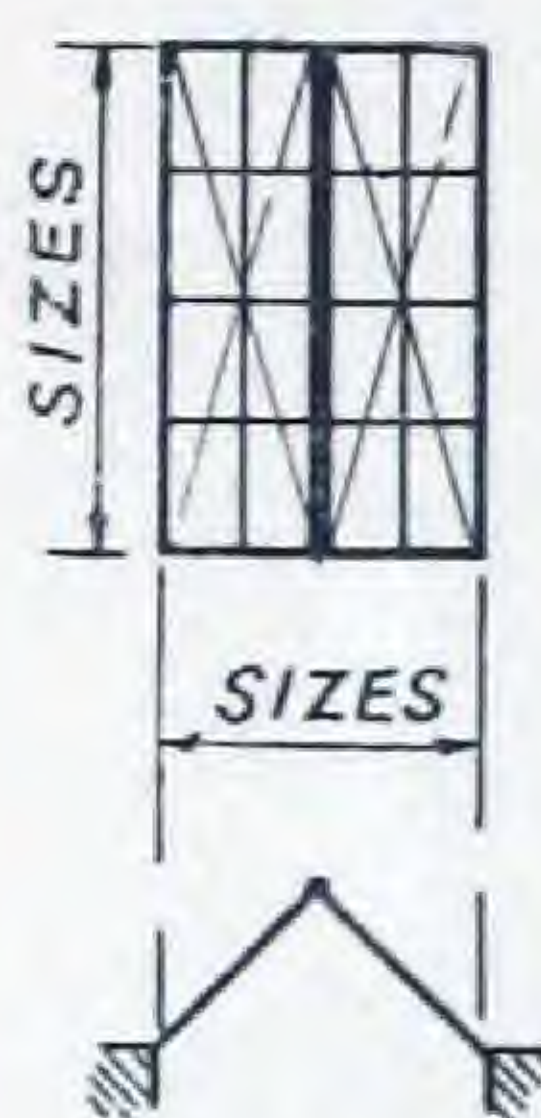
RG 43



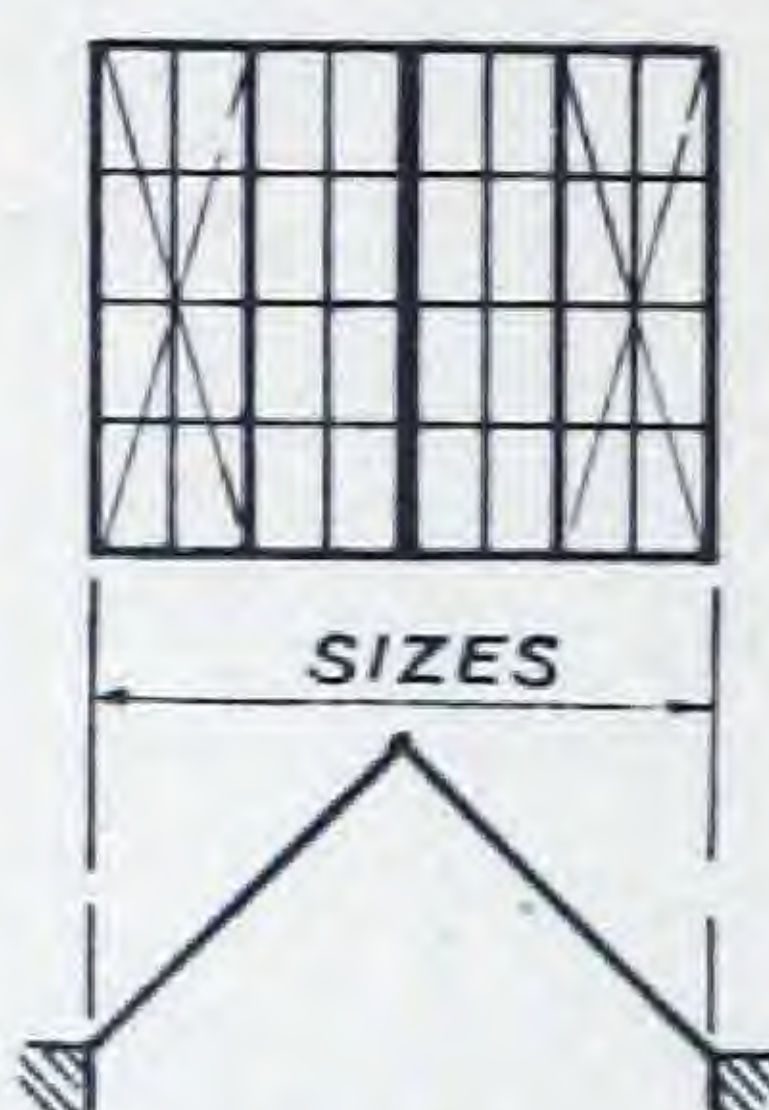
RG 4N3



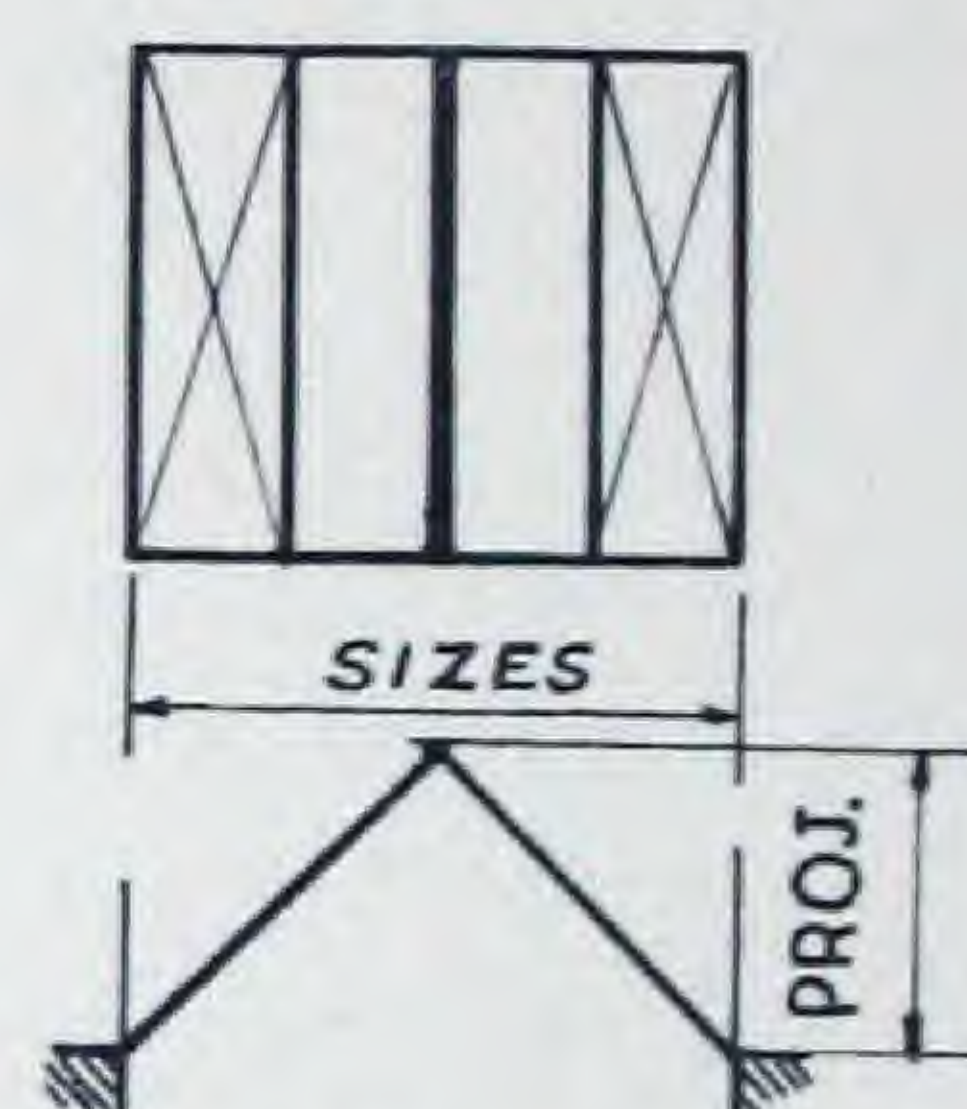
RG2N3



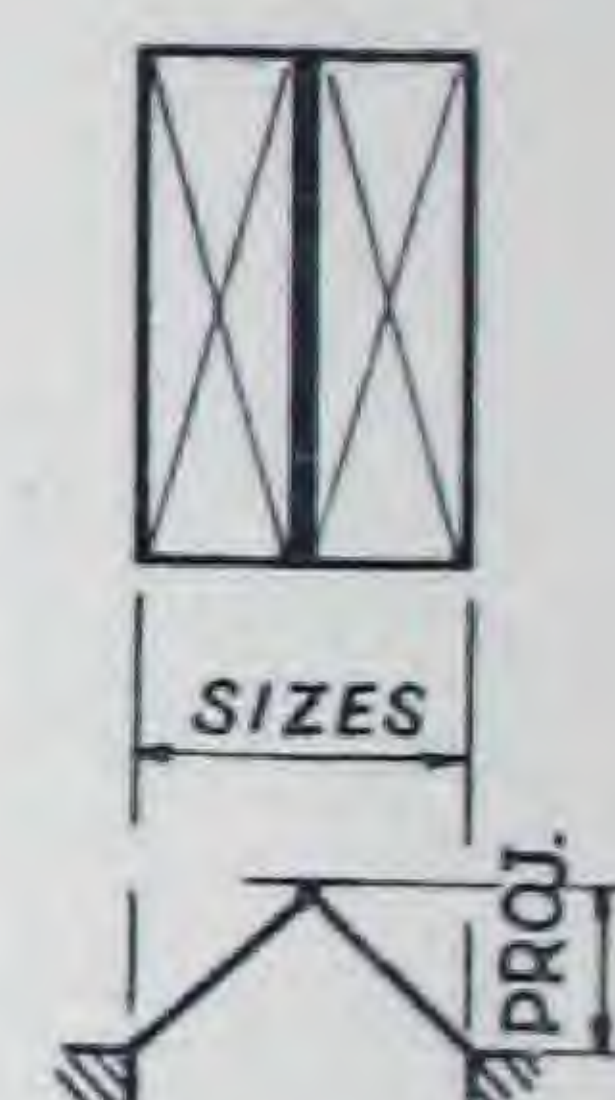
RG 24



RG 44



RG 4N4



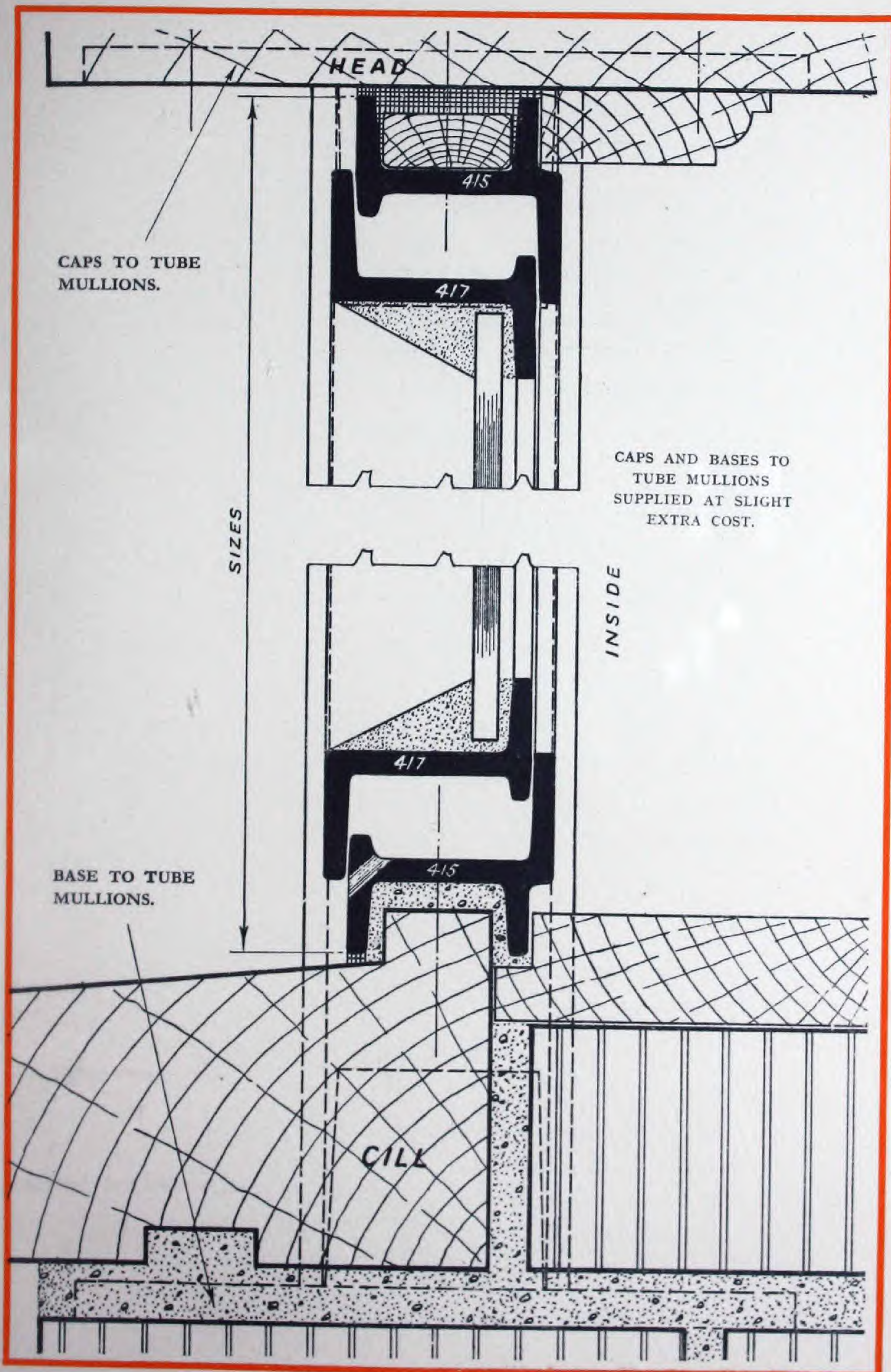
RG2N4

ORIEL BAYS

| Type | Lights Wide | Height | Width | Proj. | Type | Lights Wide | Height | Width | Proj. |
|------|-------------|--|--|--|------|-------------|--|--|--|
| RG23 | 2 | ft. 3 in. 0 ⁷ / ₈ | ft. 2 in. 6 ³ / ₈ | ft. 1 in. 3 ¹ / ₄ | RG43 | 4 | ft. 3 in. 0 ⁷ / ₈ | ft. 4 in. 9 ¹ / ₄ | ft. 2 in. 4 ¹¹ / ₁₆ |
| RG24 | 2 | ft. 4 in. 0 ¹ / ₈ | ft. 2 in. 6 ³ / ₈ | ft. 1 in. 3 ¹ / ₄ | RG44 | 4 | ft. 4 in. 0 ¹ / ₈ | ft. 4 in. 9 ¹ / ₄ | ft. 2 in. 4 ¹¹ / ₁₆ |
| RG25 | 2 | ft. 5 in. 2 ¹¹ / ₁₆ | ft. 2 in. 6 ³ / ₈ | ft. 1 in. 3 ¹ / ₄ | RG45 | 4 | ft. 5 in. 2 ¹¹ / ₁₆ | ft. 4 in. 9 ¹ / ₄ | ft. 2 in. 4 ¹¹ / ₁₆ |
| RG26 | 2 | ft. 6 in. 1 ¹⁵ / ₁₆ | ft. 2 in. 6 ³ / ₈ | ft. 1 in. 3 ¹ / ₄ | RG46 | 4 | ft. 6 in. 1 ¹⁵ / ₁₆ | ft. 4 in. 9 ¹ / ₄ | ft. 2 in. 4 ¹¹ / ₁₆ |

NOTE.—For Bays without internal Glazing Bar add the letter "N," e.g., RG2N6.
For easy cleaning Hinges add the letter "X," e.g., RG45X.

BAY WINDOW FIXING DETAILS



SPECIFICATION

Reliance Heavy Standard Casements are constructed of Rolled Mild Steel Sections of first quality. All Bars are hydraulically straightened, scaled and cleaned free from rust, hammer marks and rolling flaws.

Cross joints of glazing bars are locked to strengthen the points of intersection. Corners are machine mitred and electrically welded.

Casements are doubled weathered at all points.

All side and top hung Casements are hung on solid Bronze butts.

Sidehung Casements are provided with solid Bronze Handle and Pegstay, pin and rest.

Tophung Casements are provided with solid Bronze Pegstay, pin and rest.

All Casements are provided with countersunk fixing holes or lugs for building in as required.

Steelwork painted one coat of best grey anti-corrosive weather-resisting paint before despatch.

ARCHITECTS SPECIFICATION.

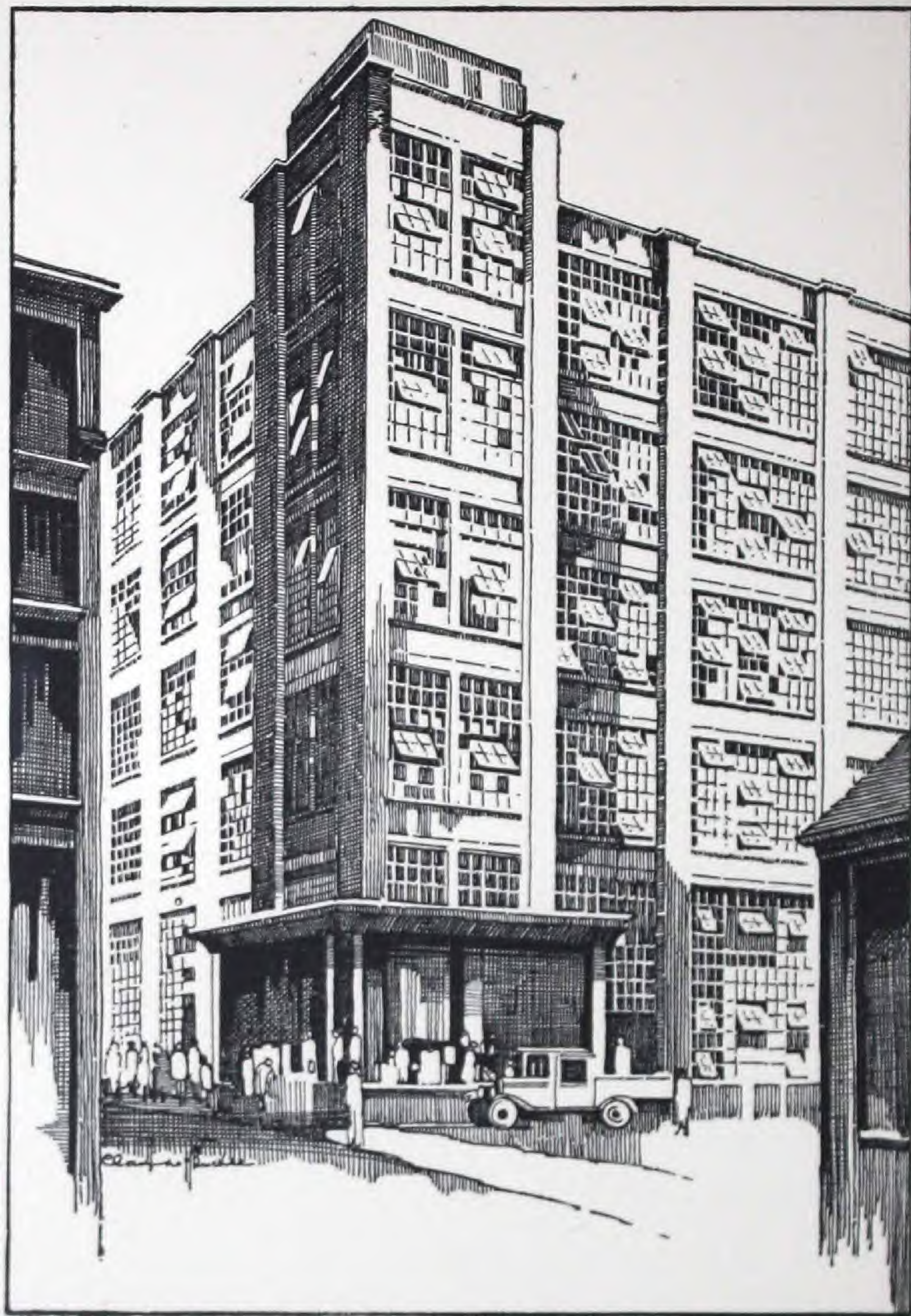
Steel Casements to be Reliance Heavy Standard Casements manufactured by Messrs. Williams & Williams Ltd., Reliance Works, Chester.

All Casements to be fitted with Standard Reliance Bronze Fittings.

When ordering Bay Windows it is necessary to give the extension of the Tubular Mullions at head and cill. If no dimension is given mullions are supplied flush.



**STANDARD
SASH**



RELIANCE STANDARD SASHES

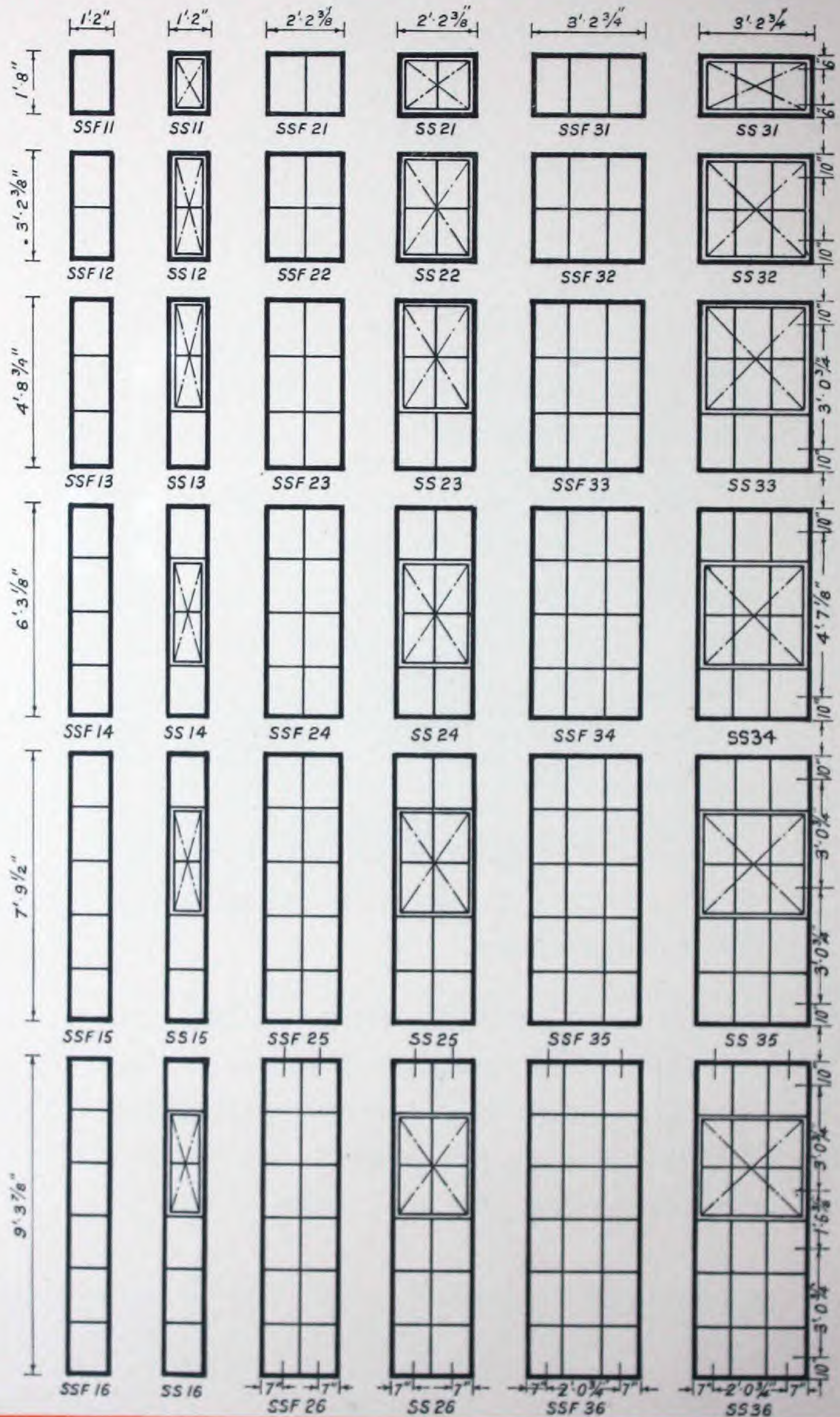
are designed for use in every class of Industrial Building.

The use of our special coupling Bar enables Reliance Standard Sashes to be coupled together to suit practically any sized opening or to form an entire wall. A few examples of coupled types are shown on page 84 in this section of our catalogue.

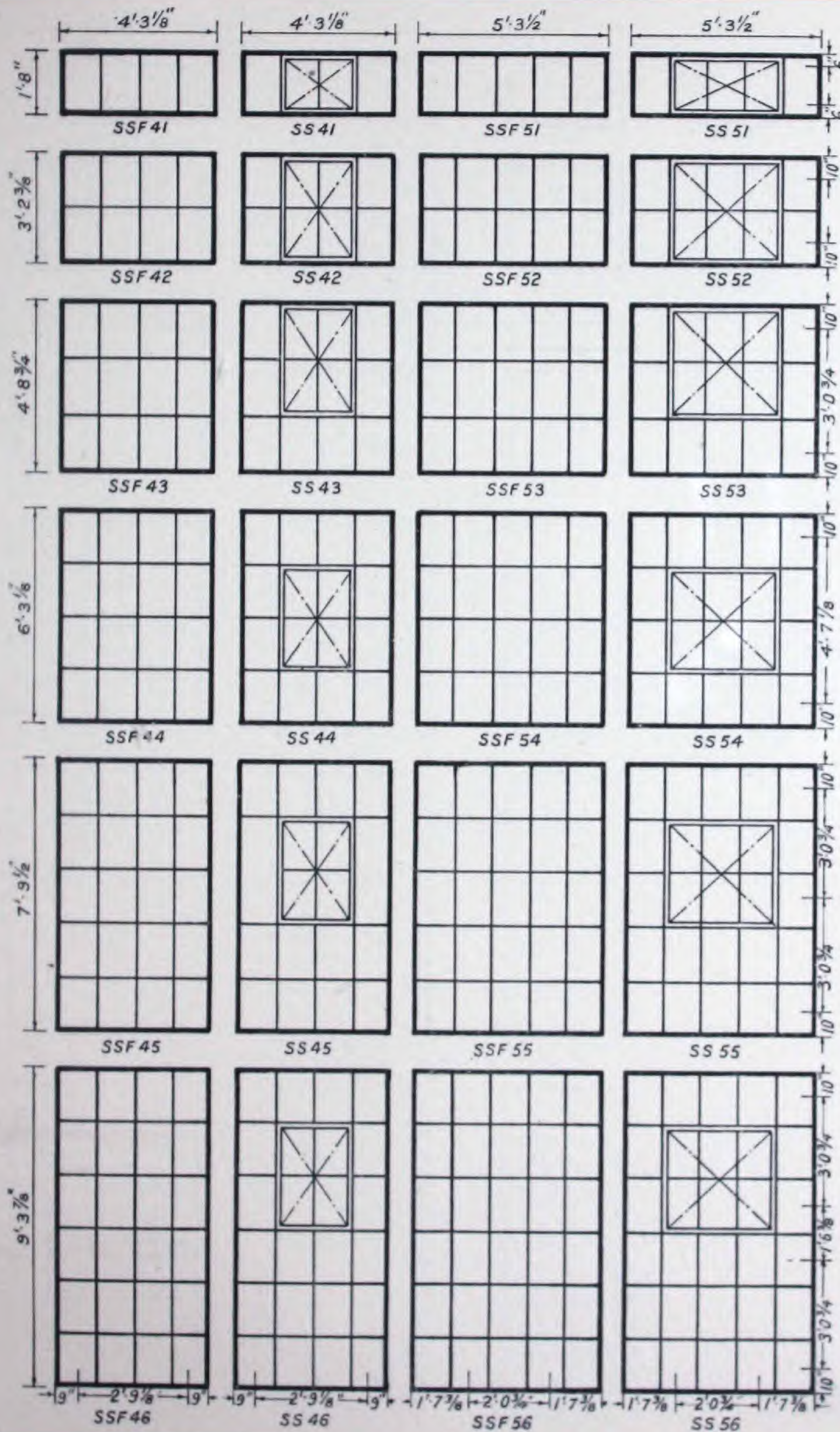
A range of these Windows is supplied with escape Vents to conform with Fire Office regulations.

For use where brick arches are incorporated in place of concrete or steel lintols a range of segmental headed fast-lights has been designed to be coupled to any of the Standard units.

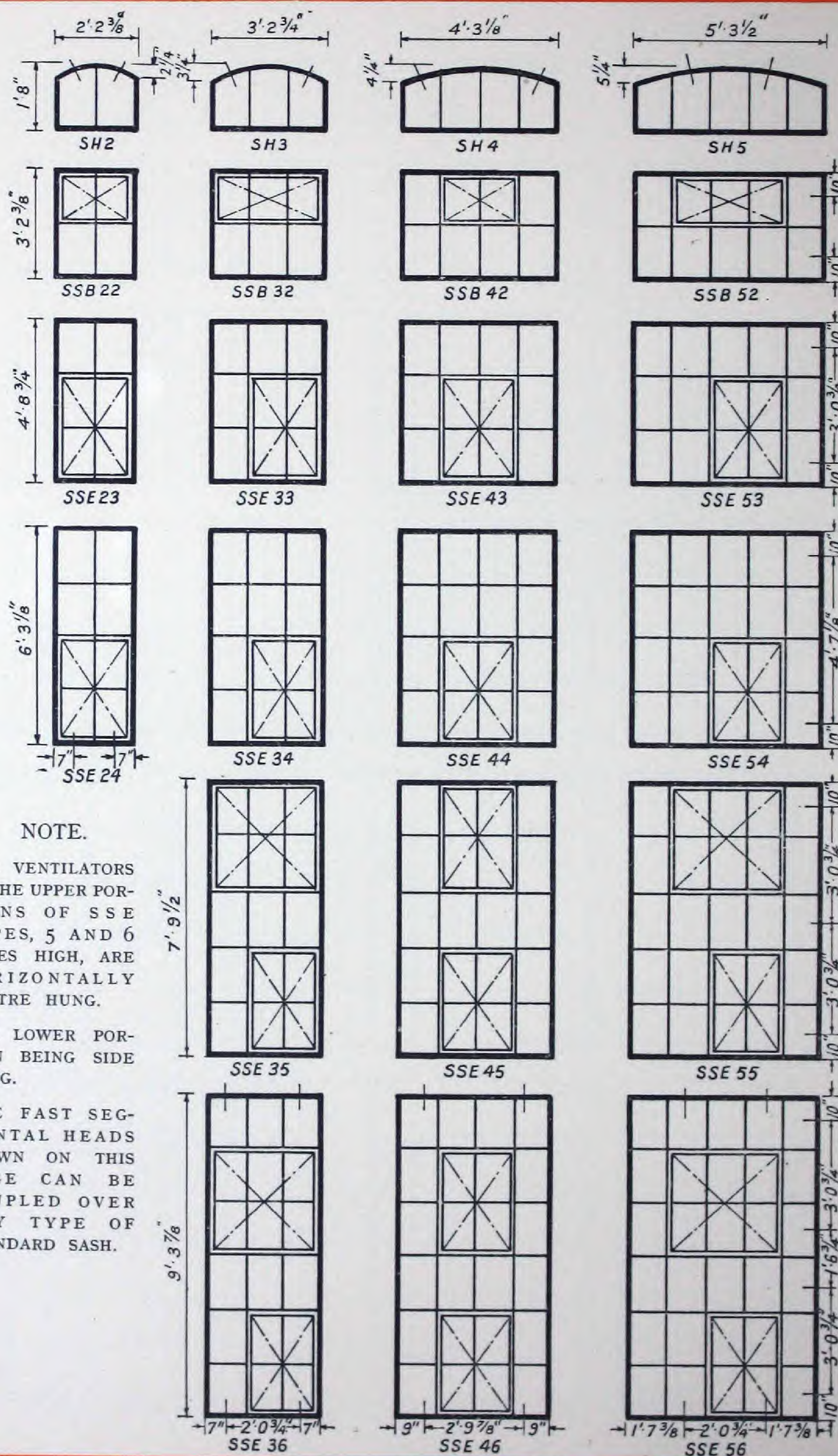
STANDARD SASH



TYPES AND SIZES



TYPES AND SIZES



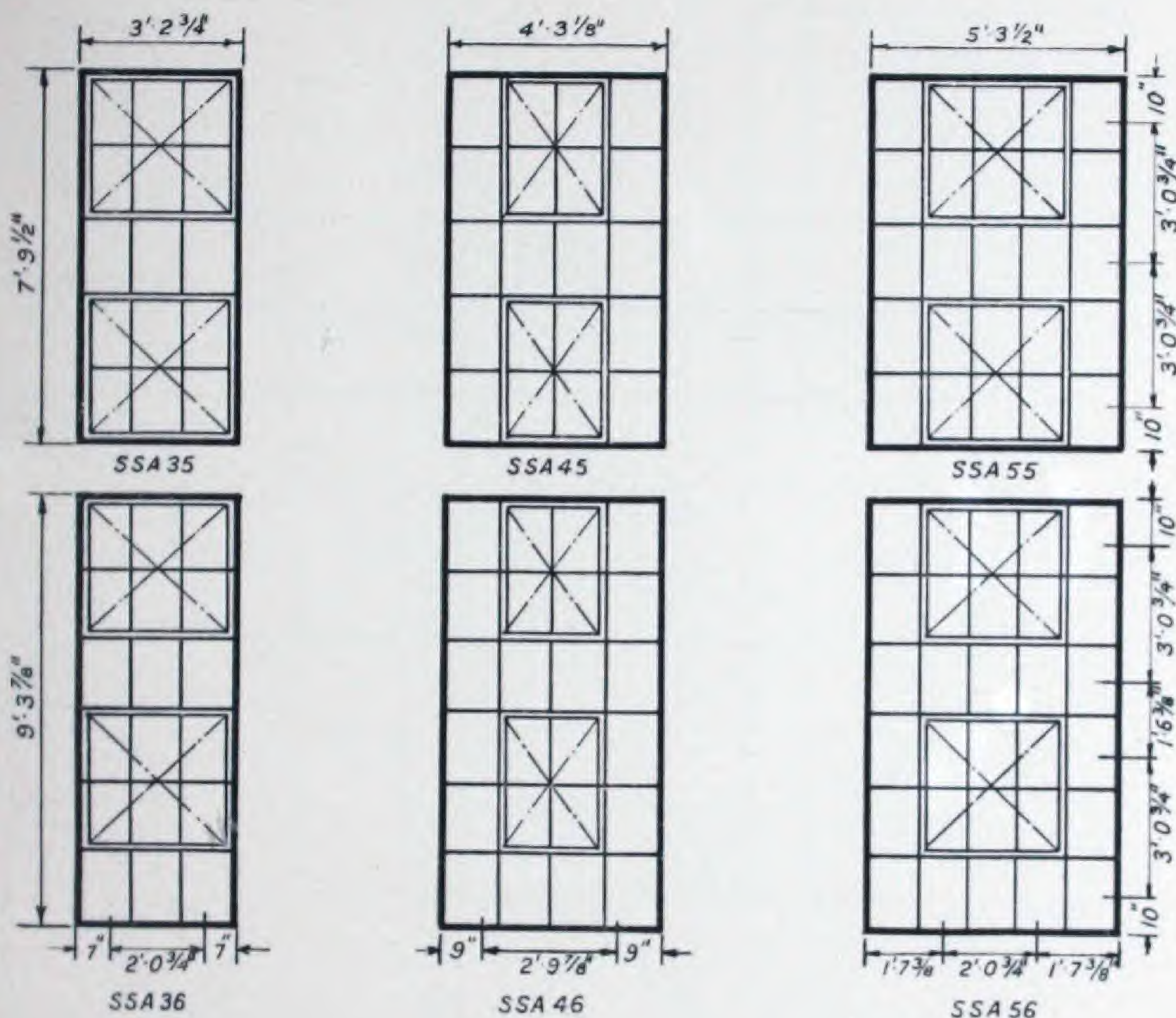
NOTE.

THE VENTILATORS IN THE UPPER PORTIONS OF SSE TYPES, 5 AND 6 PANES HIGH, ARE HORIZONTALLY CENTRE HUNG.

THE LOWER PORTION BEING SIDE HUNG.

THE FAST SEGMENTAL HEADS SHOWN ON THIS PAGE CAN BE COUPLED OVER ANY TYPE OF STANDARD SASH.

TYPES AND SIZES



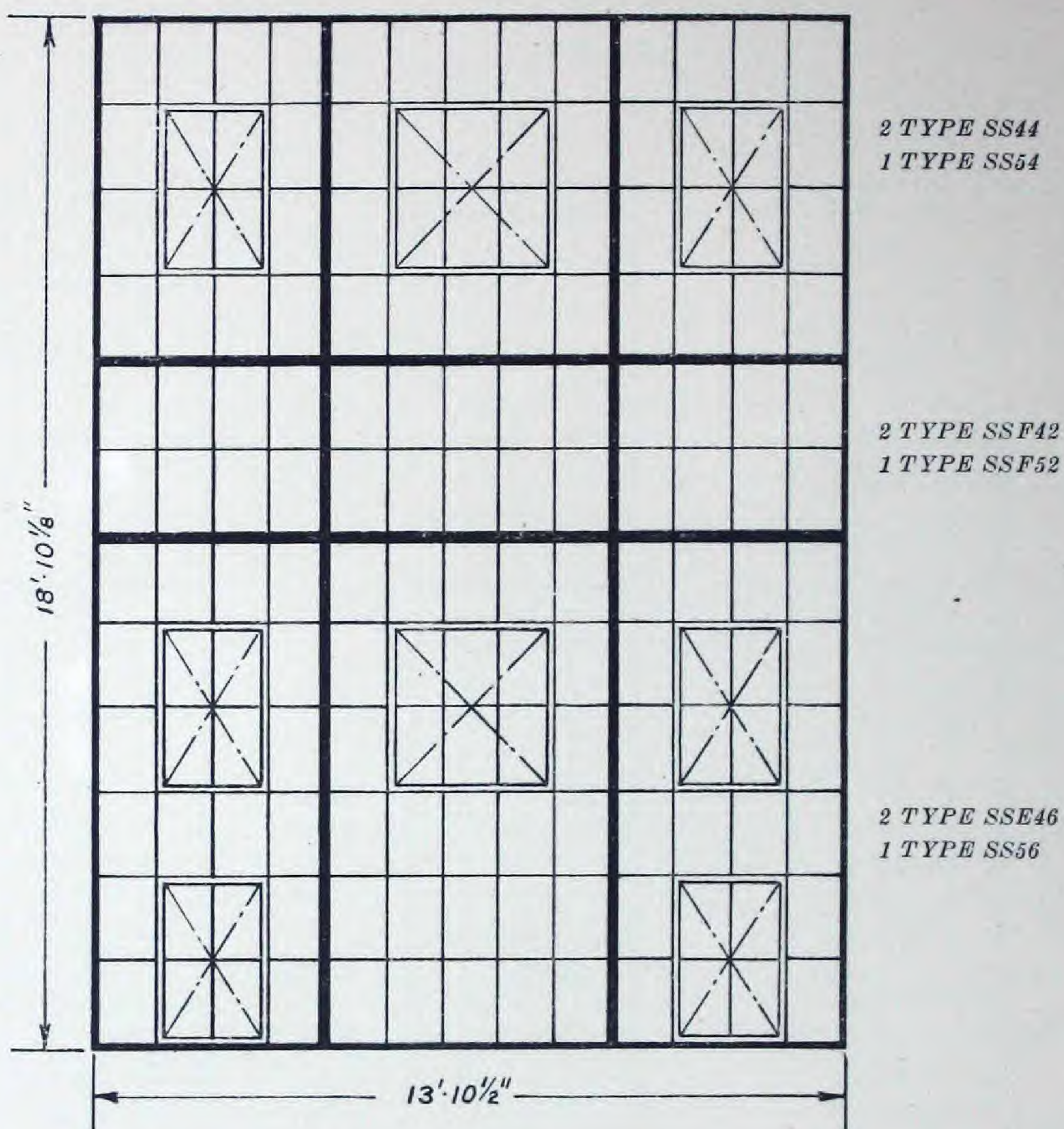
NOTE.

Any of the units shown on pages 80 to 83 can be coupled together horizontally and vertically to form composite types by means of our special Coupling Bar (No. 516) shown in the full size details on page 85.

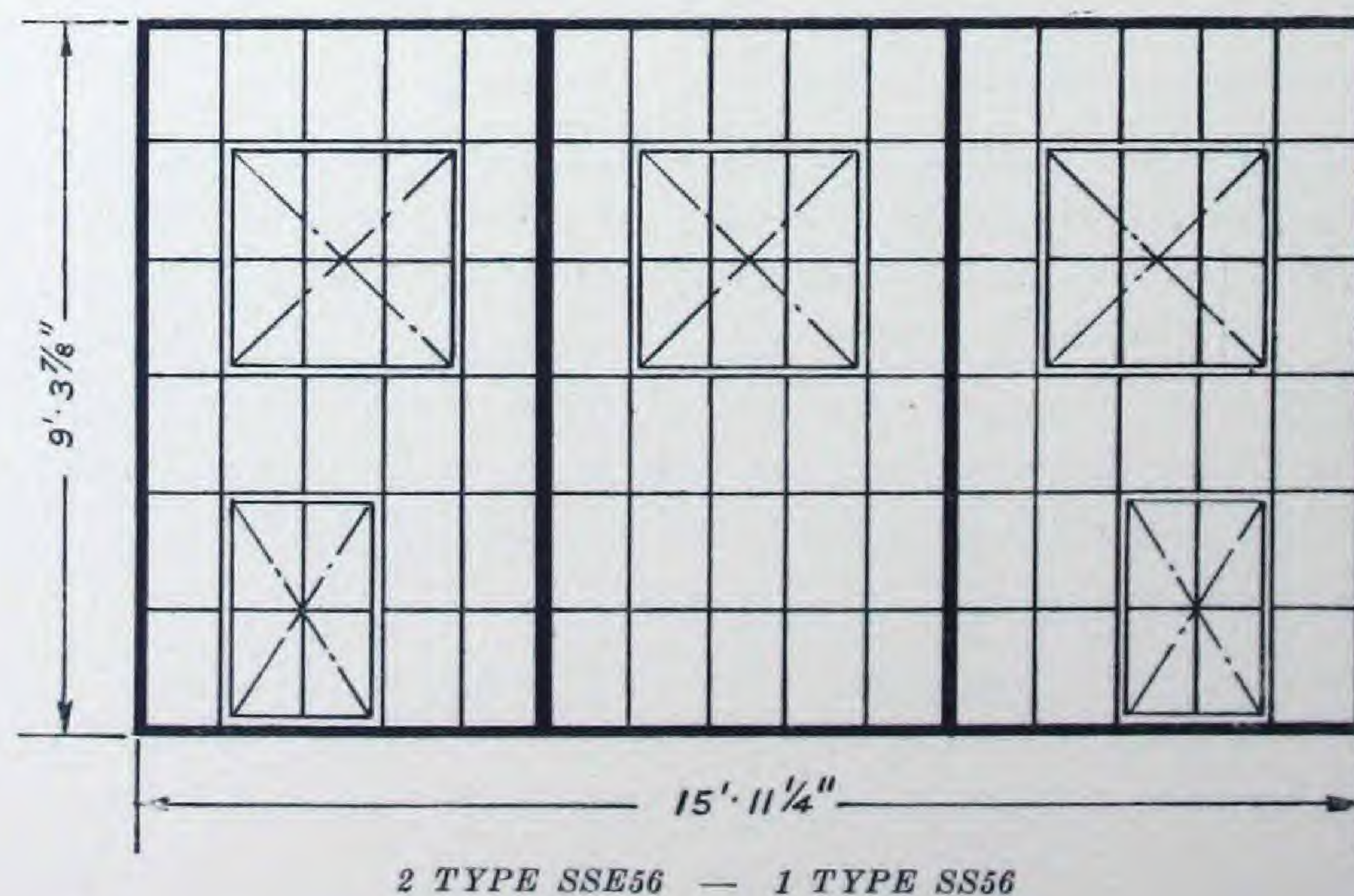
All Ventilators, except Types SSB and SSE, which are bottom hung and side hung respectively, are horizontally centre hung. They may, however, be made bottom hung if desired.

Glazing sizes are given on page 87.

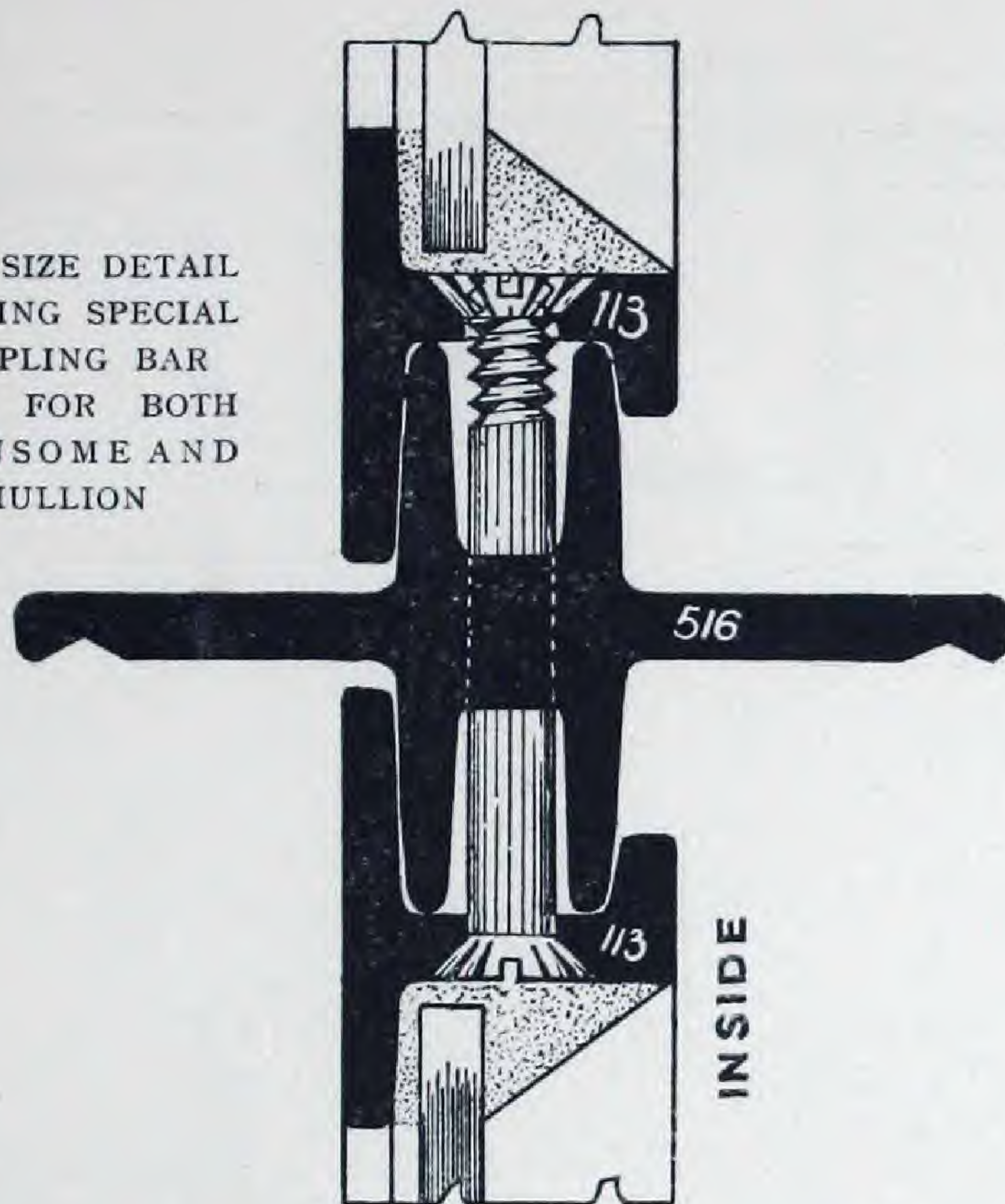
COUPLED TYPES



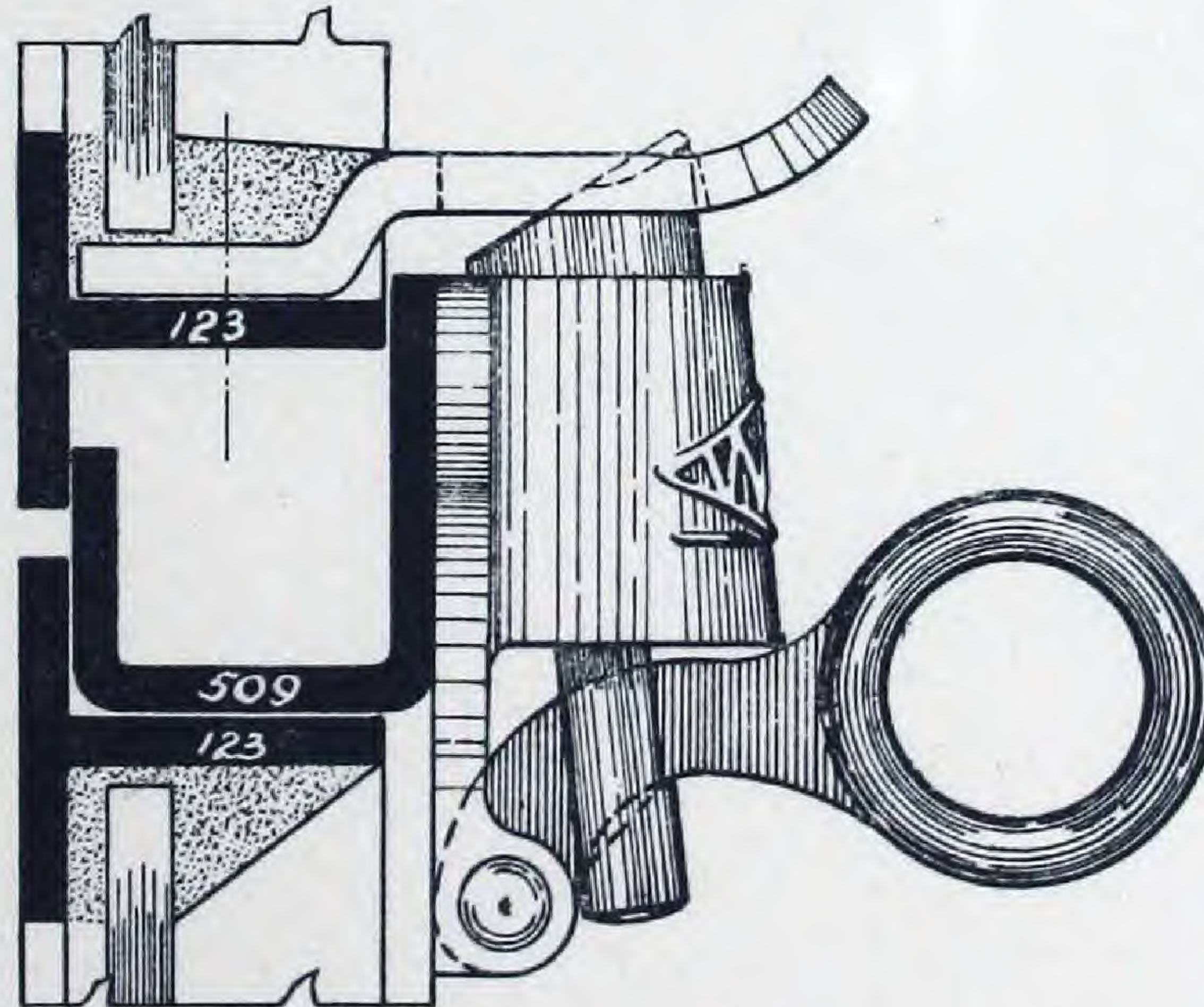
THE COUPLED TYPES SHOWN ON THIS PAGE ILLUSTRATE THE WIDE VARIETY OF TYPES WHICH CAN BE OBTAINED BY COUPLING RELIANCE STANDARD SASHES TOGETHER



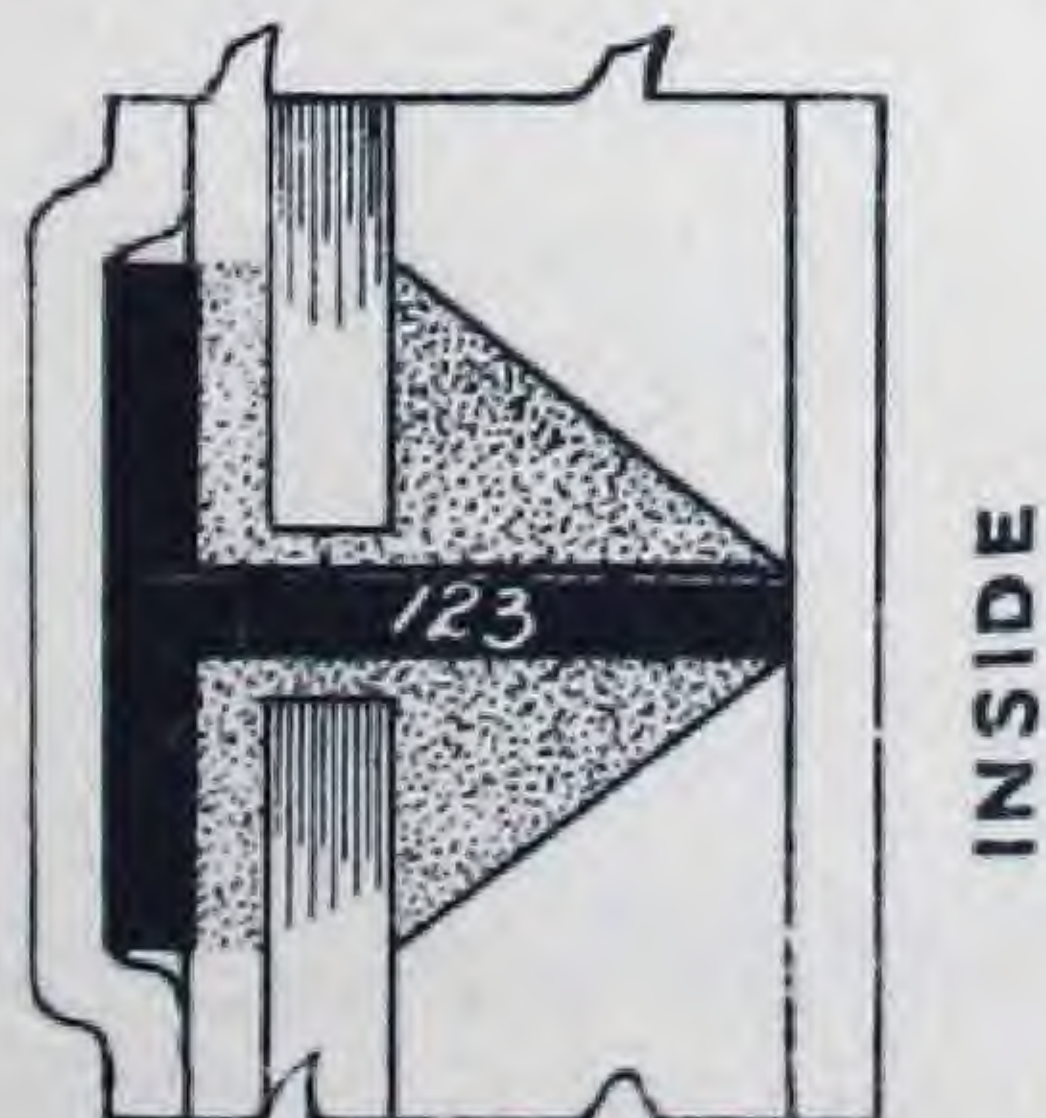
FULL SIZE DETAIL
SHOWING SPECIAL
COUPLING BAR
USED FOR BOTH
TRANSOME AND
MULLION



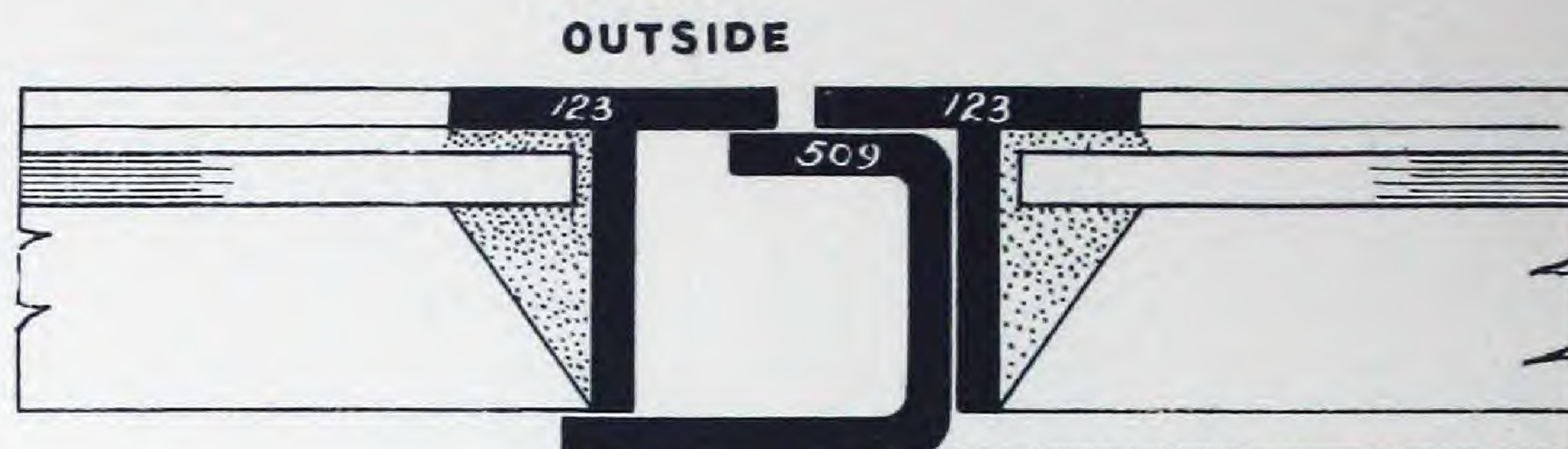
SECTION OF OPENING
CASEMENT SHOWING
SOLID BRONZE LEVER
SPRING CATCH



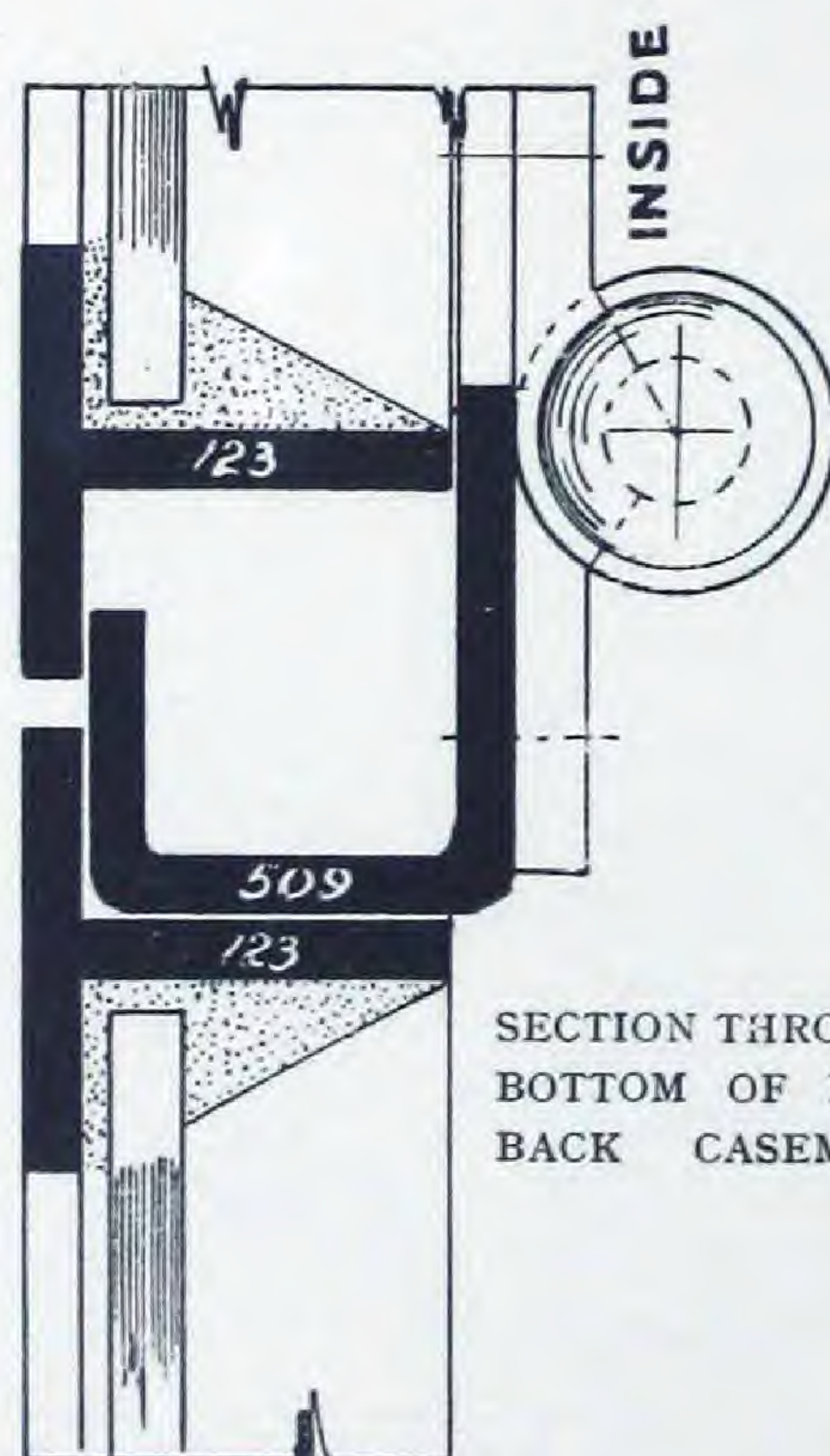
FULL SIZE SECTION
OF GLAZING BAR



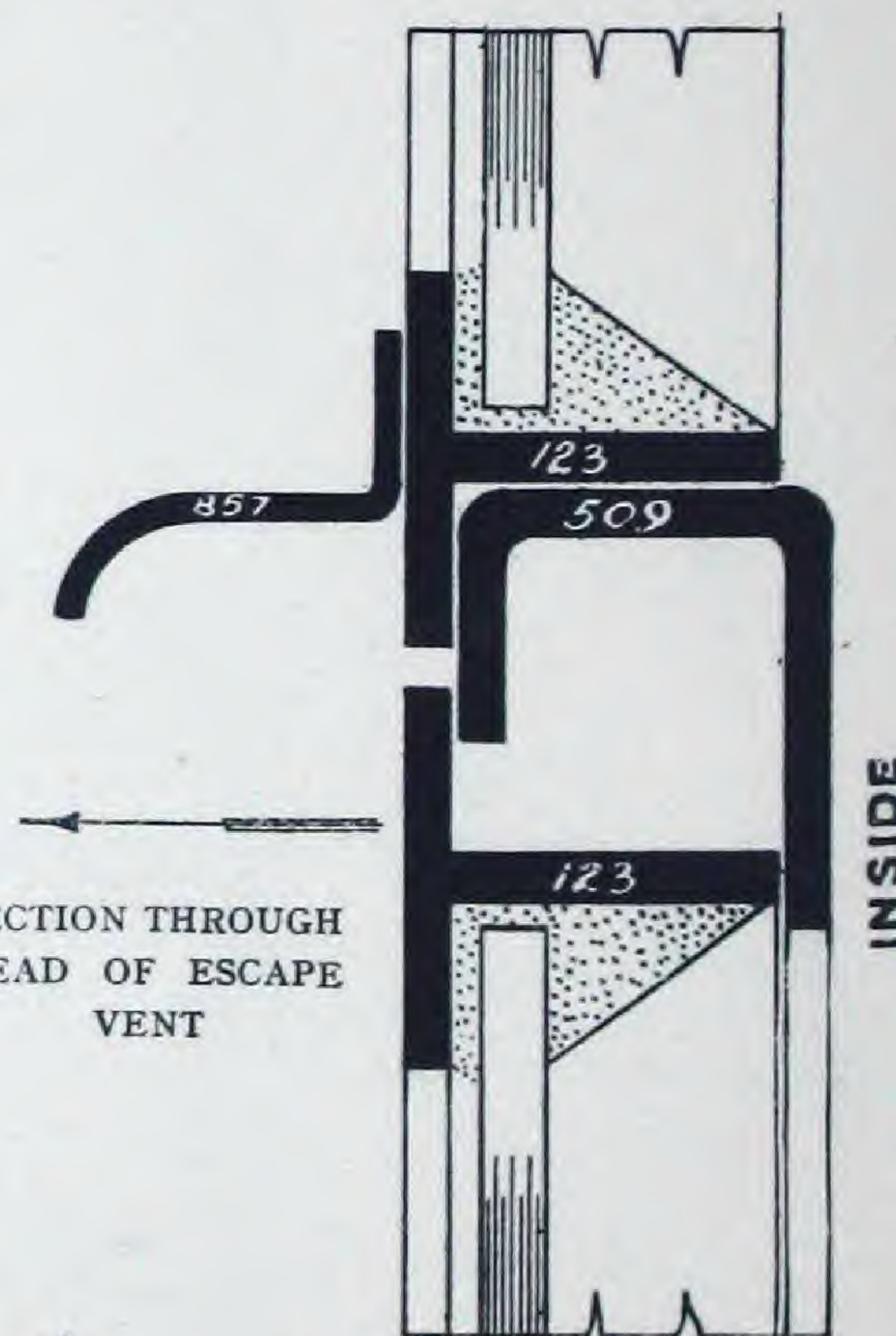
FULL SIZE
DETAILS



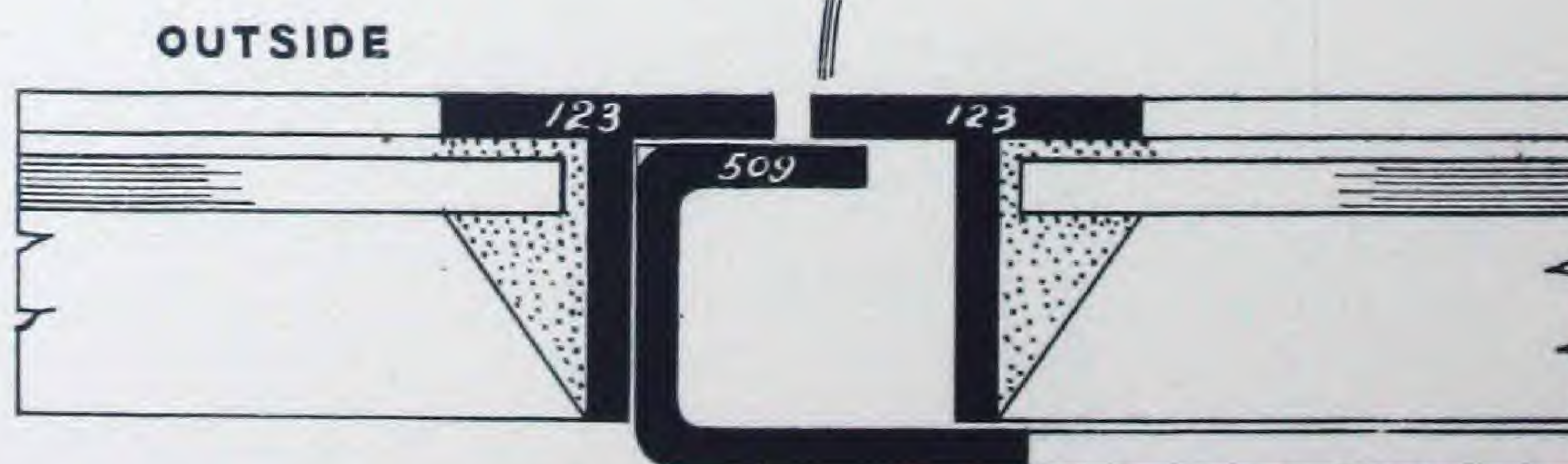
SECTION THROUGH HORIZONTAL
SWING ABOVE THE PIVOT, OR
THROUGH FALL BACK CASEMENT



SECTION THROUGH
BOTTOM OF FALL
BACK CASEMENT



SECTION THROUGH
HEAD OF ESCAPE
VENT

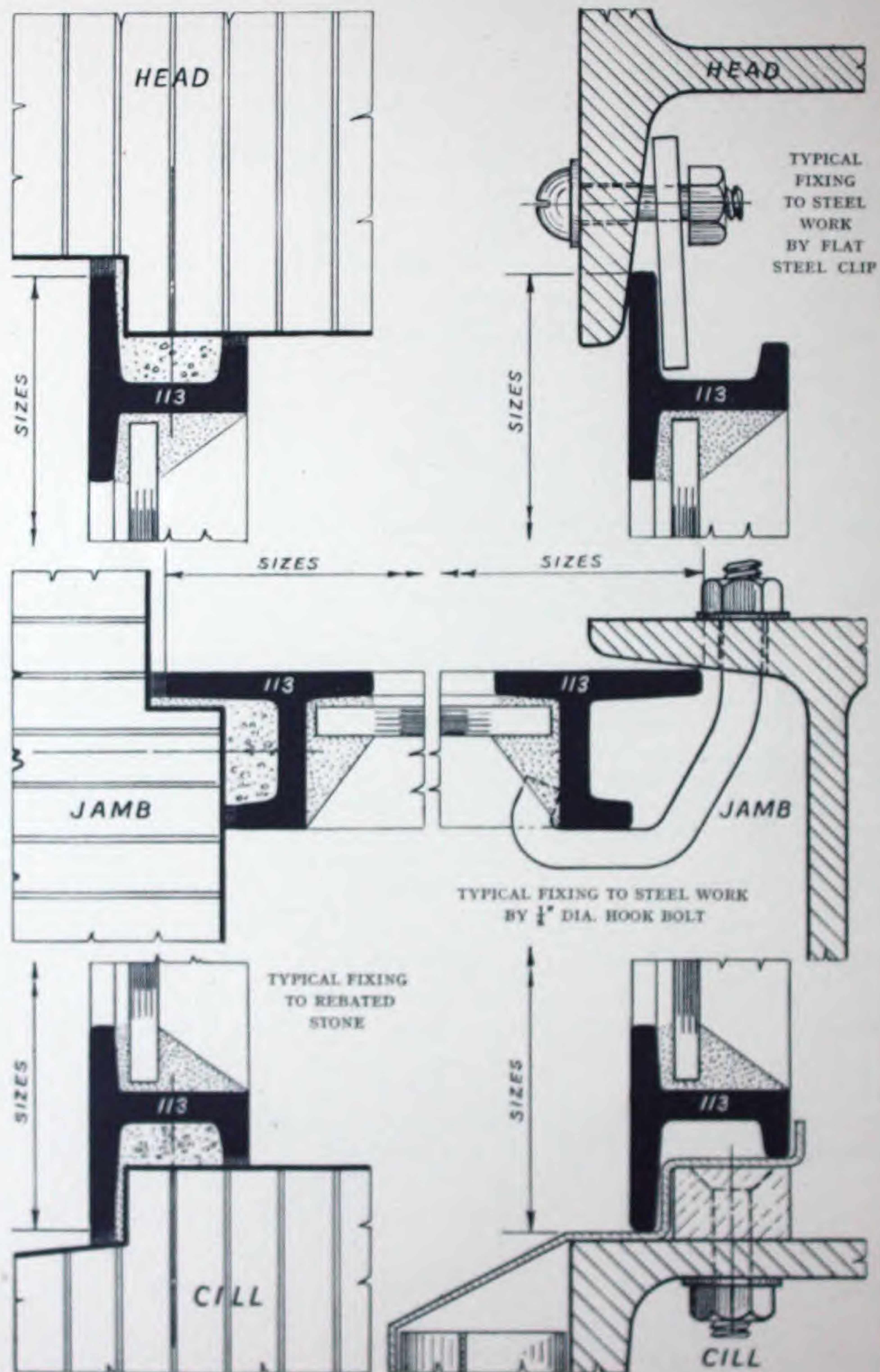


HORIZONTAL SECTION THROUGH ESCAPE VENT

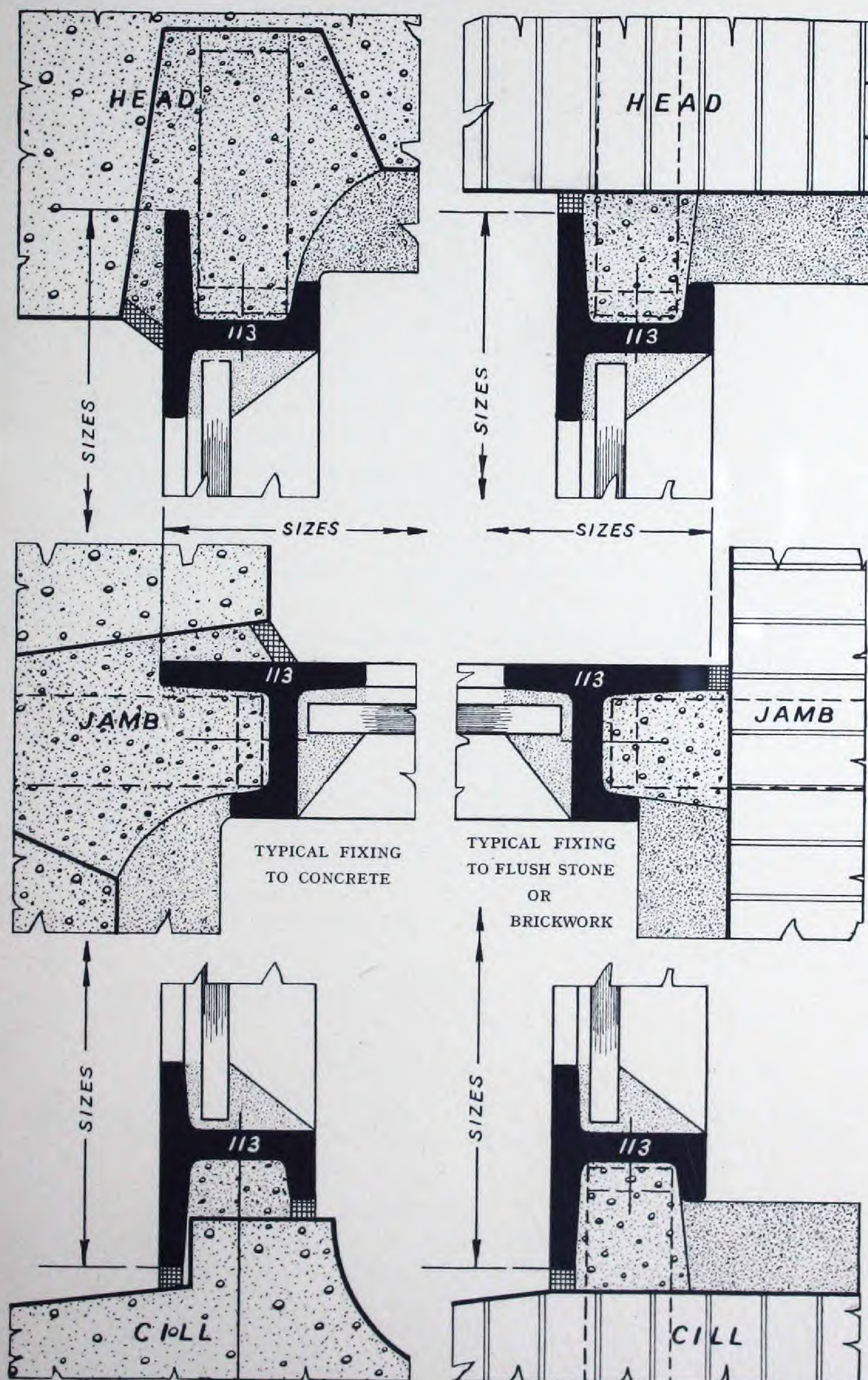
GLAZING SIZES

| Types | No. of Panels | Height | Width | Types | No. of Panels | Height | Width | Types | No. of Panels | Height | Width | Types | No. of Panels | Height | Width |
|--------------|------------------|--|------------------------------|--------------|------------------|--|------------------------------|--------------|------------------|--|------------------------------|--------------|------------------|--|------------------------------|
| | | ins. | ins. | | | ins. | ins. | | | ins. | ins. | | | ins. | ins. |
| SSF11 | 1 | 18 | 12 | SS13 | 1 2 | 18 16 $\frac{7}{8}$ | 12 9 $\frac{3}{4}$ | SSF25 | 10 | 18 | 12 | SSA36 | 6 8 4 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |
| SS11 | 1 | 15 $\frac{3}{4}$ | 9 $\frac{3}{4}$ | SSF23 | 6 | 18 | 12 | SS25 | 6 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSA46 | 16 8 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF21 | 2 | 18 | 12 | SS23 | 2 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSF35 | 15 | 18 | 12 | SSA56 | 18 8 4 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |
| SS21 | 2 | 15 $\frac{3}{4}$ | 10 $\frac{7}{8}$ | SSF33 | 9 | 18 | 12 | SS35 | 9 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSB22 | 2 2 | 18 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ |
| SSF31 | 3 | 18 | 12 | SS33 | 3 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSF45 | 20 | 18 | 12 | SSB32 | 3 2 1 | 18 15 $\frac{3}{4}$ 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ 12 |
| SS31 | 2 1 | 15 $\frac{3}{4}$ 15 $\frac{3}{4}$ | 10 $\frac{7}{8}$ 12 | SSF43 | 12 | 18 | 12 | SS45 | 16 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSB42 | 6 2 | 18 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ |
| SSF41 | 4 | 18 | 12 | SS43 | 8 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSF55 | 25 | 18 | 12 | SSB52 | 7 2 1 | 18 15 $\frac{3}{4}$ 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ 12 |
| SS41 | 2 2 | 18 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ | SSF53 | 15 | 18 | 12 | SS55 | 19 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSE23 | 2 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF51 | 5 | 18 | 12 | SS53 | 9 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSF16 | 6 | 18 | 12 | SSE33 | 5 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SS51 | 2 2 1 | 18 15 $\frac{3}{4}$ 15 $\frac{3}{4}$ | 12 10 $\frac{7}{8}$ 12 | SSF14 | 4 | 18 | 12 | SS16 | 4 2 | 18 16 $\frac{7}{8}$ | 12 9 $\frac{3}{4}$ | SSE43 | 8 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF12 | 2 | 18 | 12 | SS14 | 2 2 | 18 16 $\frac{7}{8}$ | 12 9 $\frac{3}{4}$ | SSF26 | 12 | 18 | 12 | SSE53 | 11 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SS12 | 2 | 16 $\frac{7}{8}$ | 9 $\frac{3}{4}$ | SSF24 | 8 | 18 | 12 | SS26 | 8 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSE24 | 4 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF22 | 4 | 18 | 12 | SS24 | 4 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSF36 | 18 | 18 | 12 | SSE34 | 8 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SS22 | 4 | 16 $\frac{7}{8}$ | 10 $\frac{7}{8}$ | SSF34 | 12 | 18 | 12 | SS36 | 12 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSE44 | 12 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF32 | 6 | 18 | 12 | SS34 | 6 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSF46 | 24 | 18 | 12 | SSE54 | 16 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SS32 | 4 2 | 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 10 $\frac{7}{8}$ 12 | SSF44 | 16 | 18 | 12 | SS46 | 20 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSE35 | 5 8 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |
| SSF42 | 8 | 18 | 12 | SS44 | 12 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSF56 | 30 | 18 | 12 | SSE45 | 12 8 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SS42 | 4 4 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSF54 | 20 | 18 | 12 | SS56 | 24 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSE55 | 15 8 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |
| SSF52 | 10 | 18 | 12 | SS54 | 14 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSA35 | 3 8 4 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSE36 | 8 8 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |
| SS52 | 4 4 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSF15 | 5 | 18 | 12 | SSA45 | 12 8 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ | SSE46 | 16 8 | 18 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ |
| SSF13 | 3 | 18 | 12 | SS15 | 3 2 | 18 16 $\frac{7}{8}$ | 12 9 $\frac{3}{4}$ | SSA55 | 13 8 4 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 | SSE56 | 20 8 2 | 18 16 $\frac{7}{8}$ 16 $\frac{7}{8}$ | 12 10 $\frac{7}{8}$ 12 |

FIXING DETAILS



FIXING DETAILS



SPECIFICATION

Standard Sashes are constructed of Rolled Mild Steel Sections of first quality. All Bars are hydraulically straightened, scaled and cleaned free from rust, hammer marks and rolling flaws.

Cross joints of glazing bars are locked to strengthen the points of intersection. All other joints are machine tenoned and rivetted.

All ventilators are double weathered by means of Reliance special unequal lining Bars and are hung on heavy forged steel pivots with Bronze pins, whether centre, bottom, or side hung.

Horizontal Swing Vents are provided with solid Bronze spring catch and pulley for cord operation, or if specified malleable iron pegstay, pin and rest.

Bottom hung vents are provided with solid Bronze spring pulley catch and pulley for cord operation.

Side hung vents are provided with malleable Iron Handle, Pegstay, Pin and Rest. The pivots are fitted at top and bottom of vents close to side of Casement, providing access for easy cleaning.

All sashes are provided with $\frac{5}{16}$ -in. diam. Countersunk Fixing Holes or supplied with Lugs for building in, as required.

Special mullion or transome sections to be supplied where called for to couple the standard units. These mullions have 1-in. extension at head, cill and jambs, unless otherwise specified.

All Steel-work receives a coat of anti-corrosive weather-resisting paint before despatch.

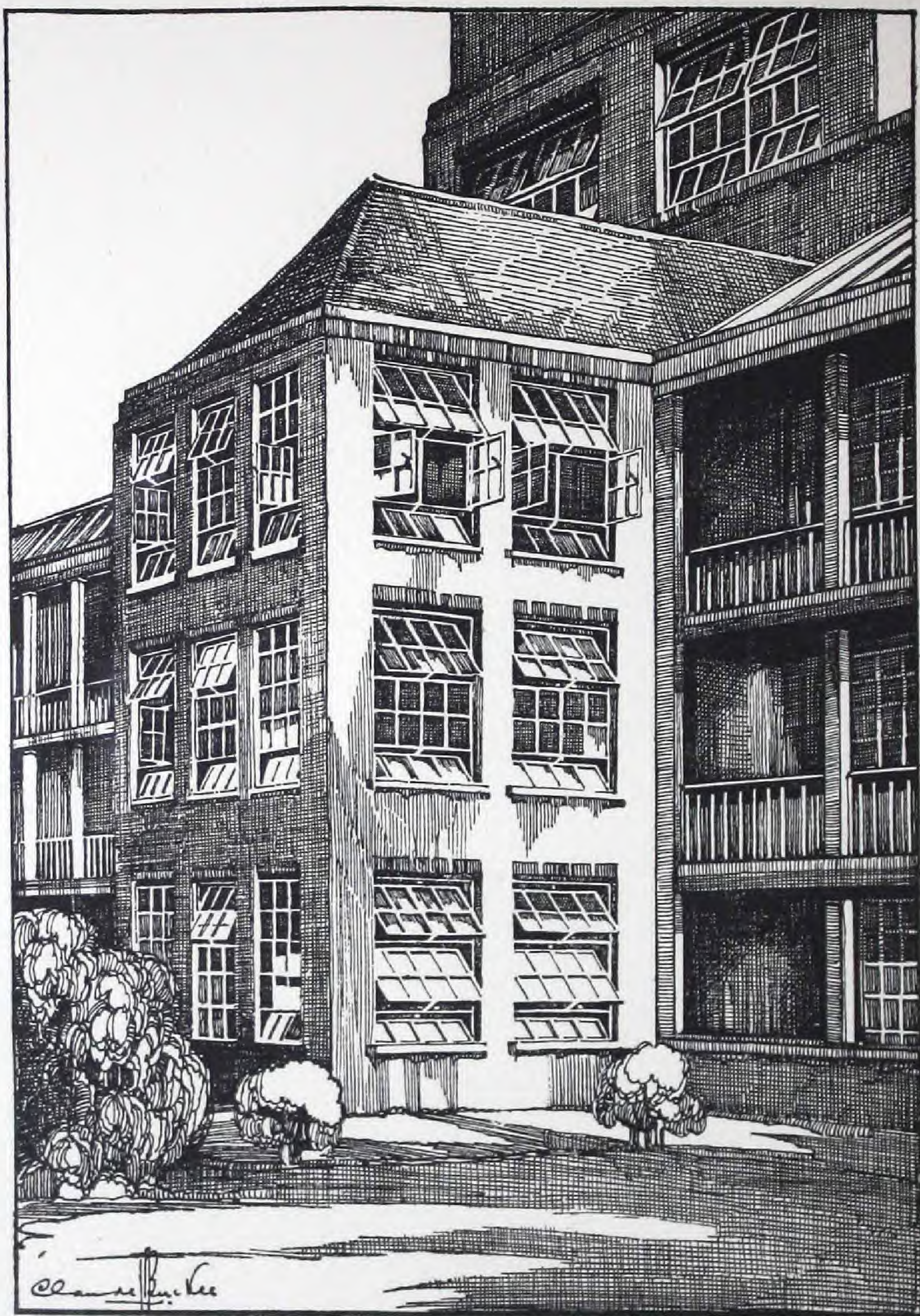
ARCHITECTS SPECIFICATION.

Steel Windows to be Reliance Standard Sashes manufactured by Messrs. Williams and Williams Ltd., Reliance Works, Chester.

Owing to the rapid advances made in Metal Casement manufacture, we reserve the right to embody any change or improvement into the details shown in this catalogue.



STANDARD
SCHOOL
OFFICE &
HOSPITAL
WINDOWS



The Windows in this section have been carefully designed to conform with Ministry of Health regulations for schools, offices and hospitals.

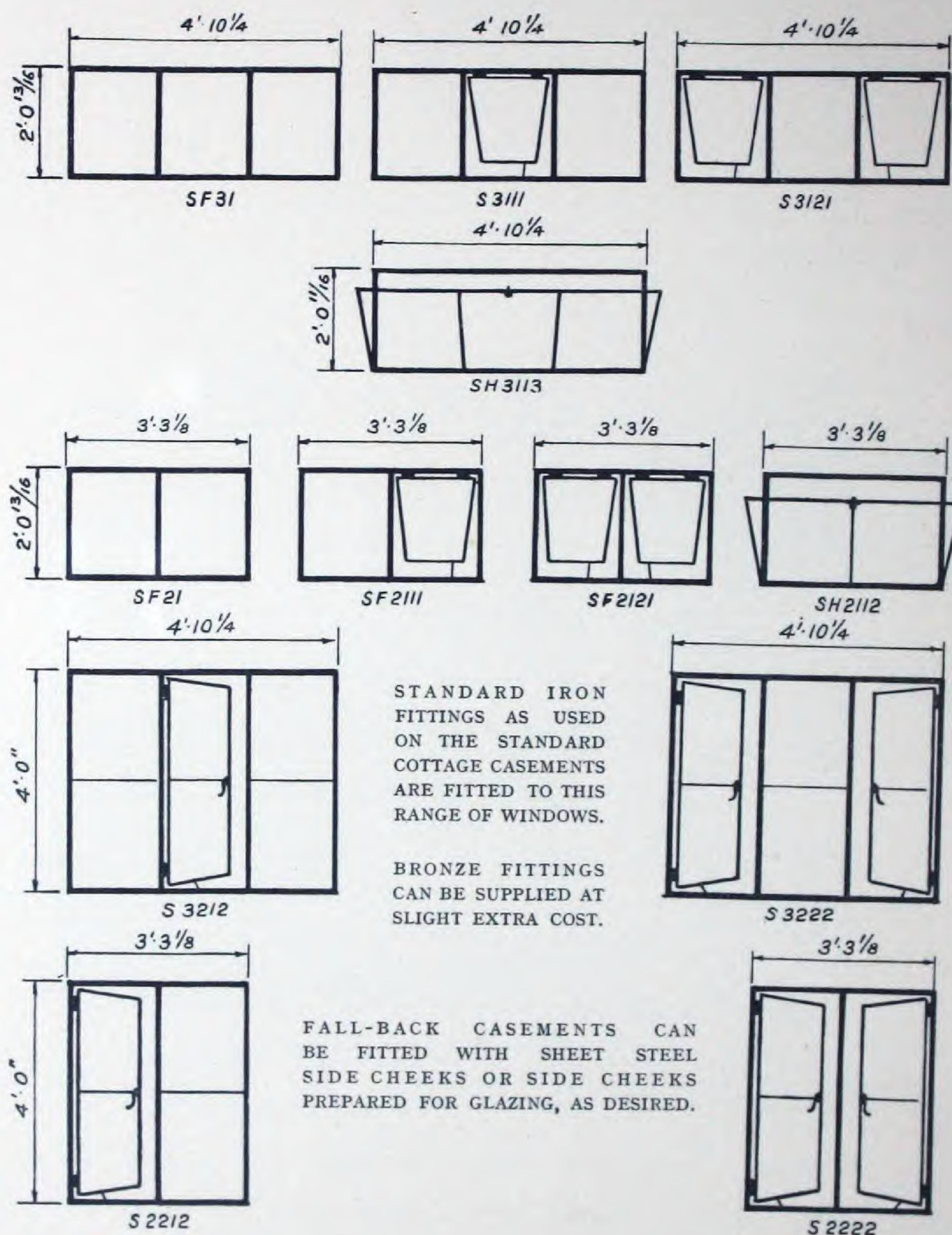
THE STANDARD HOSPITAL WINDOWS

type S.O.,

are made to be used in conjunction with the School type Windows, type B.R. The design of these enables the vertical glazing bars to line through.

The advantages of being able to couple these types together will readily be seen on looking at the example on page 96. Coupling is by means of our special coupling bar, which is rolled with two continuous ribs to give double weathering, and to withstand wind pressure, or other strains which otherwise would be taken by the coupling bolts.

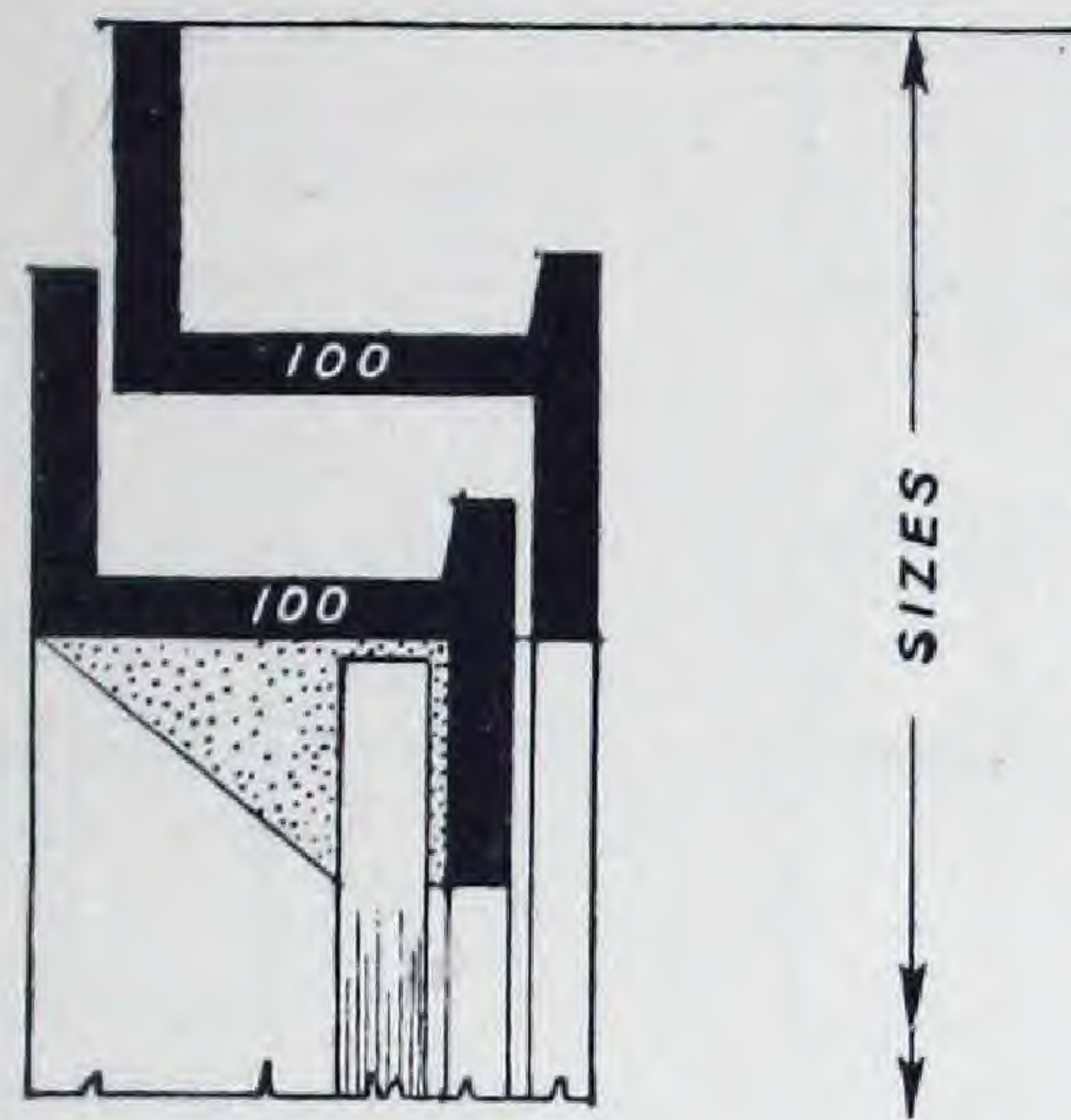
TYPES AND SIZES



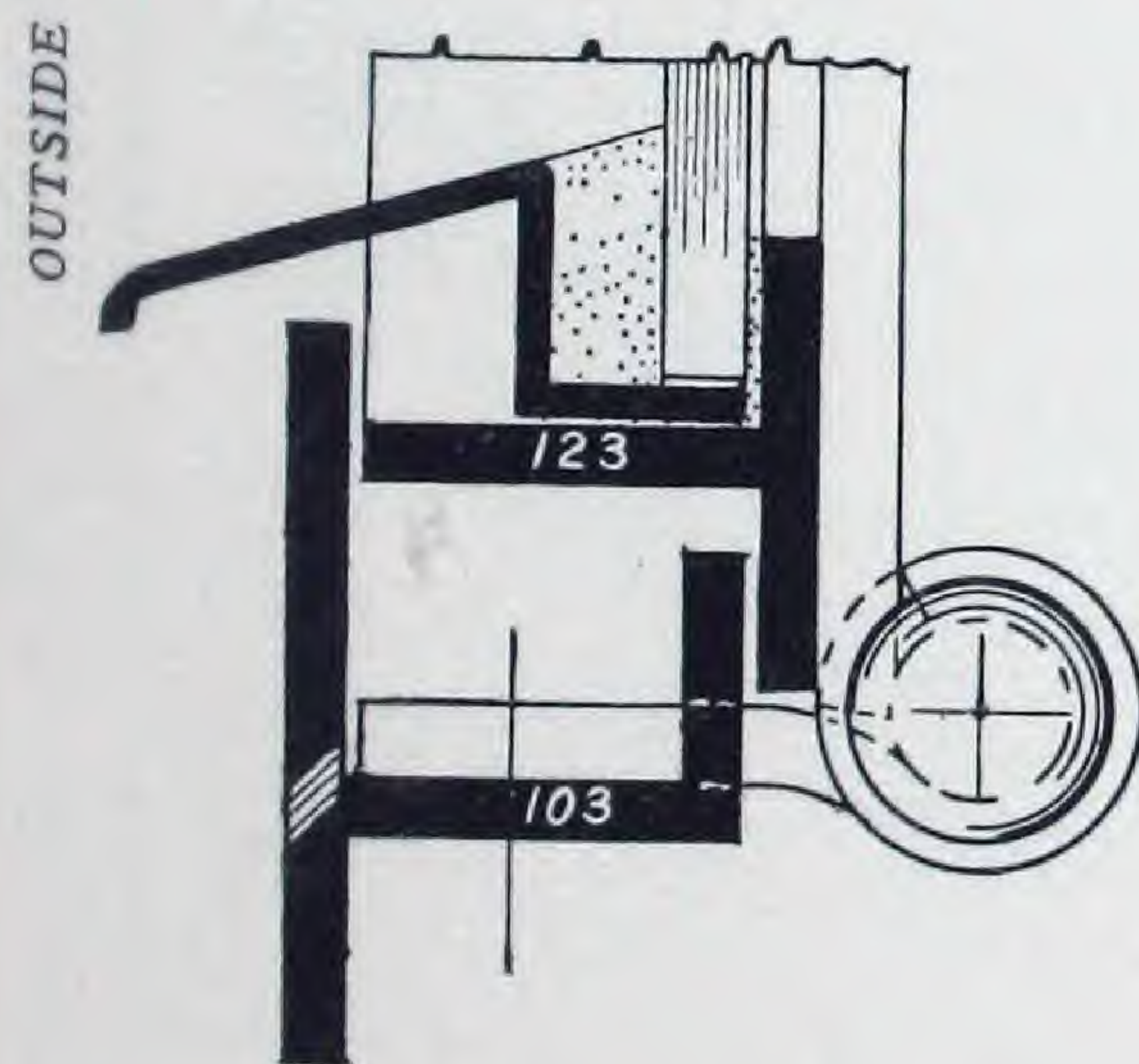
NOTE.

THE WHOLE OF THIS RANGE OF WINDOWS IS ALSO MADE IN OUR RELIANCE UNIVERSAL SECTION, SERIES 400. TYPES AND SIZES TOGETHER WITH FULL SIZE DETAILS ARE SHOWN ON PAGES 97 AND 98.

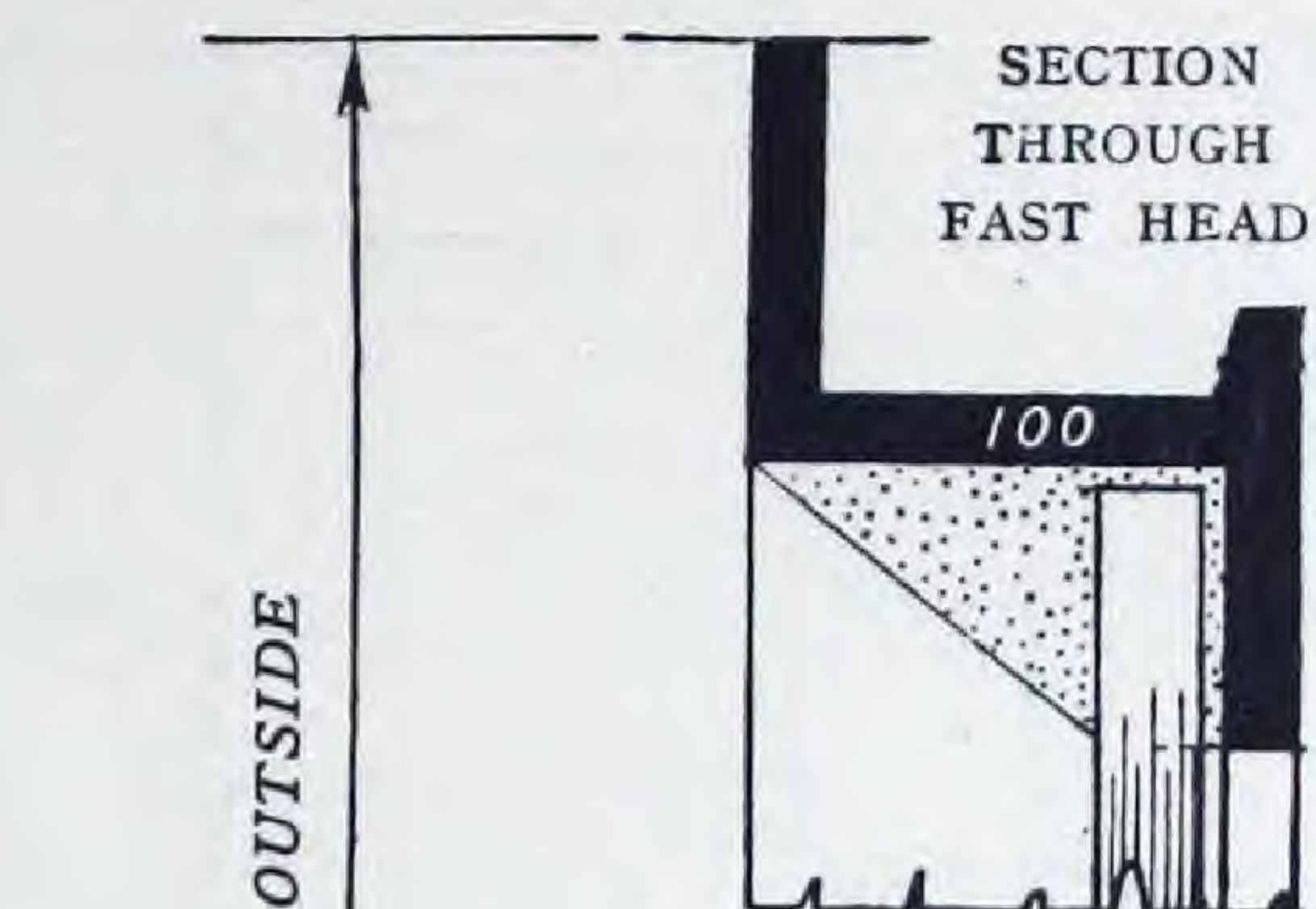
A FEW SUGGESTED METHODS OF COUPLING BOTH THESE RANGES OF WINDOWS ARE GIVEN ON PAGE 96.



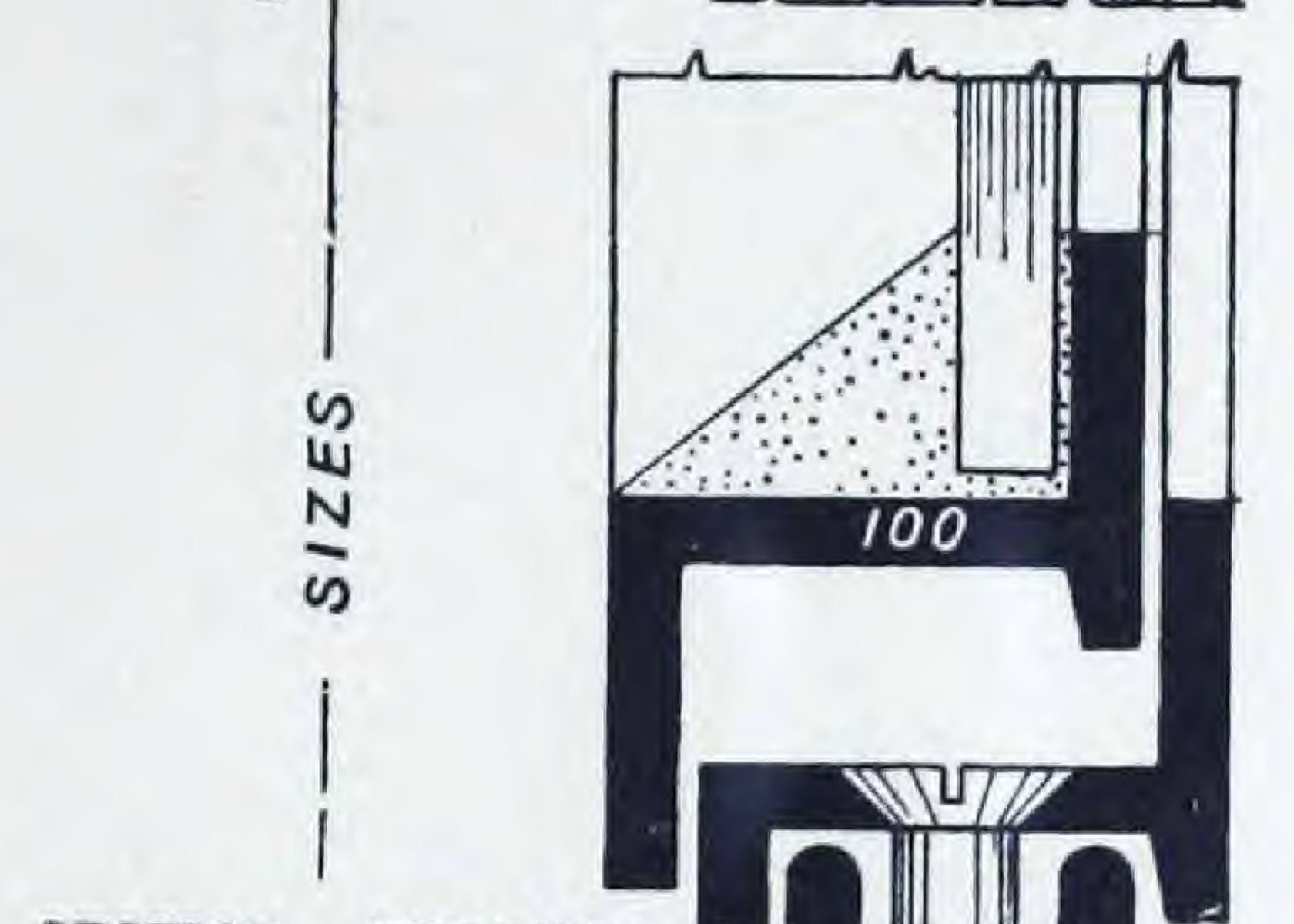
SECTION THROUGH
HEAD OF SIDE HUNG
CASEMENT



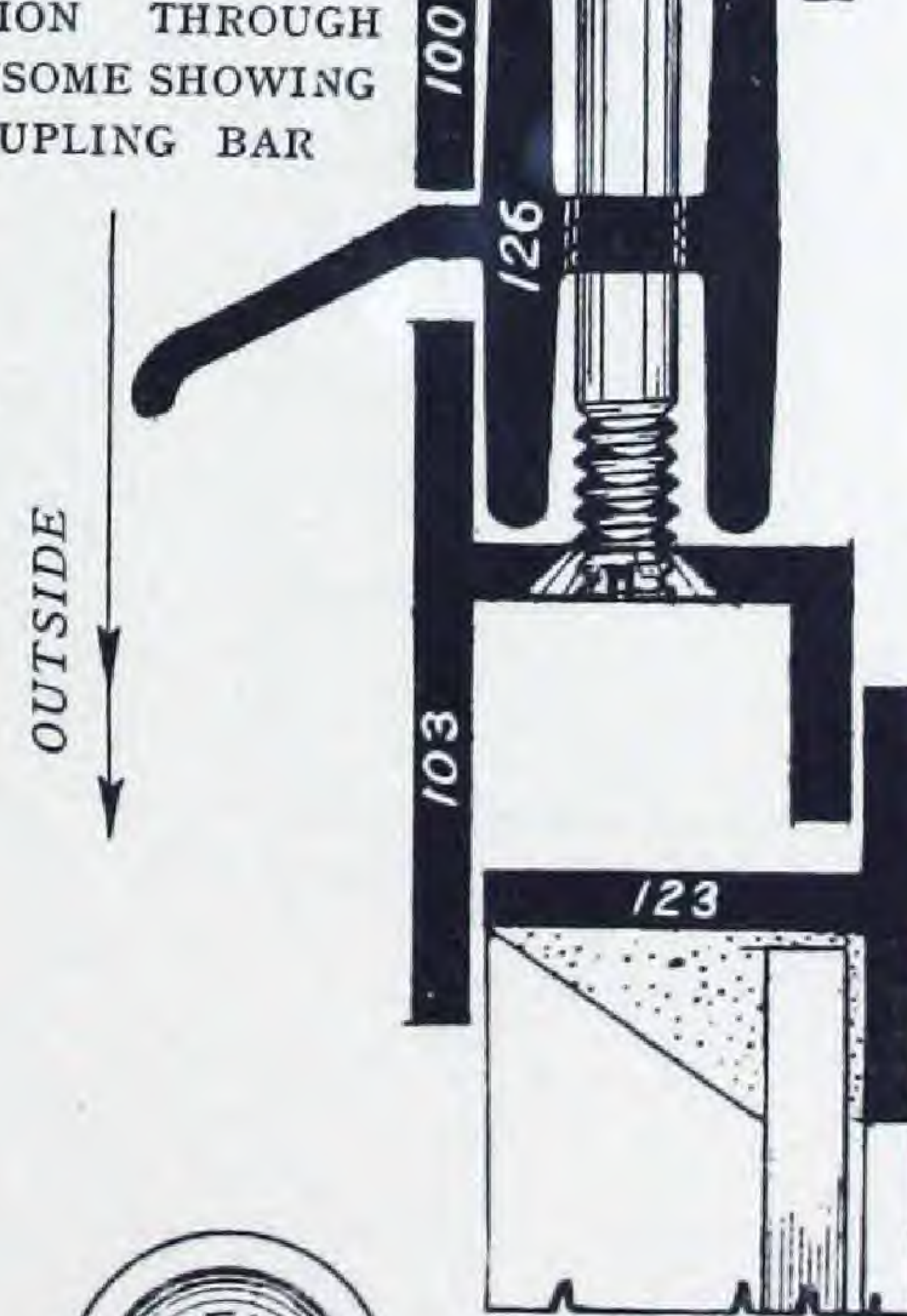
SECTION THROUGH
CILL OF FALL BACK
CASEMENT



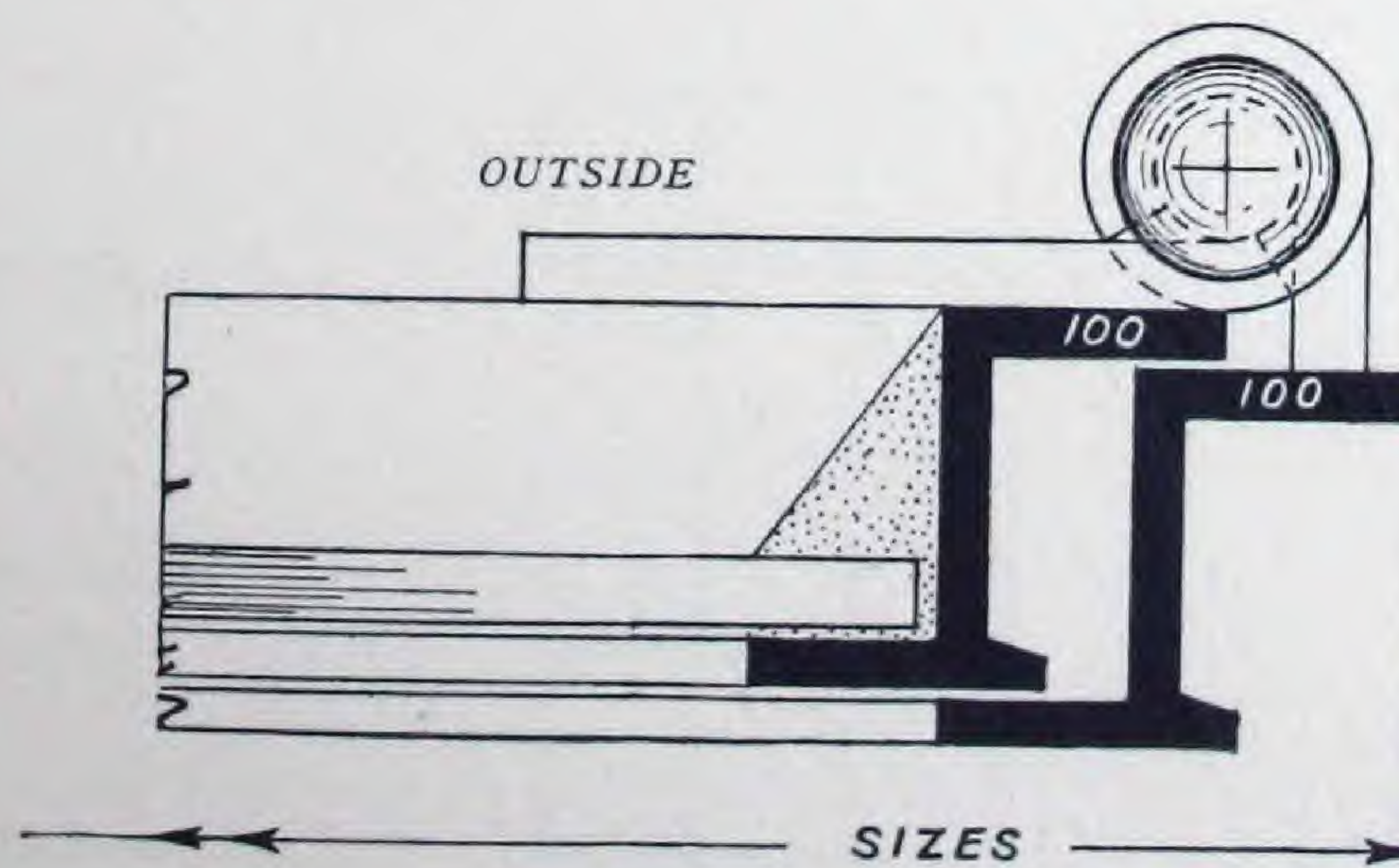
SECTION
THROUGH
FAST HEAD



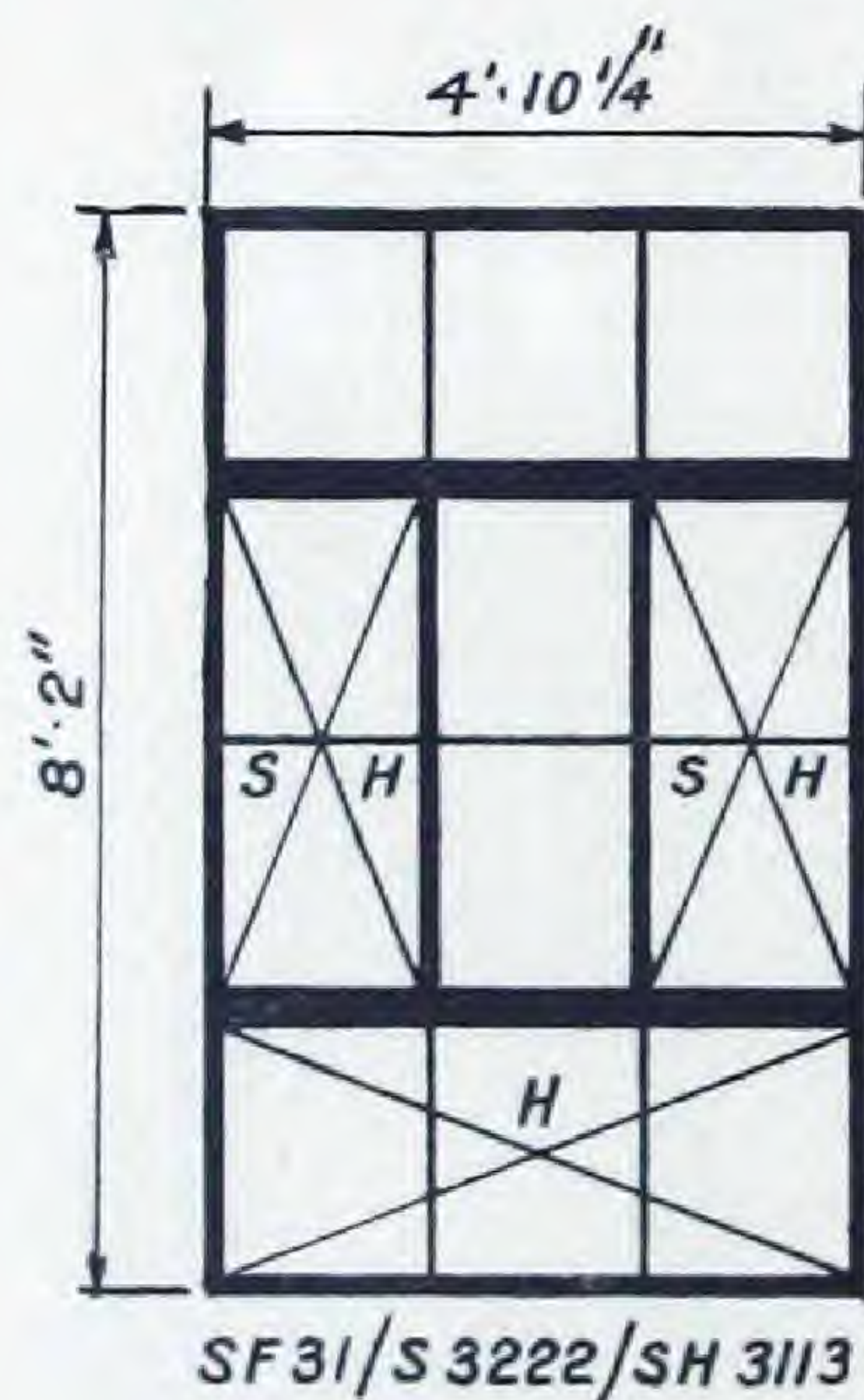
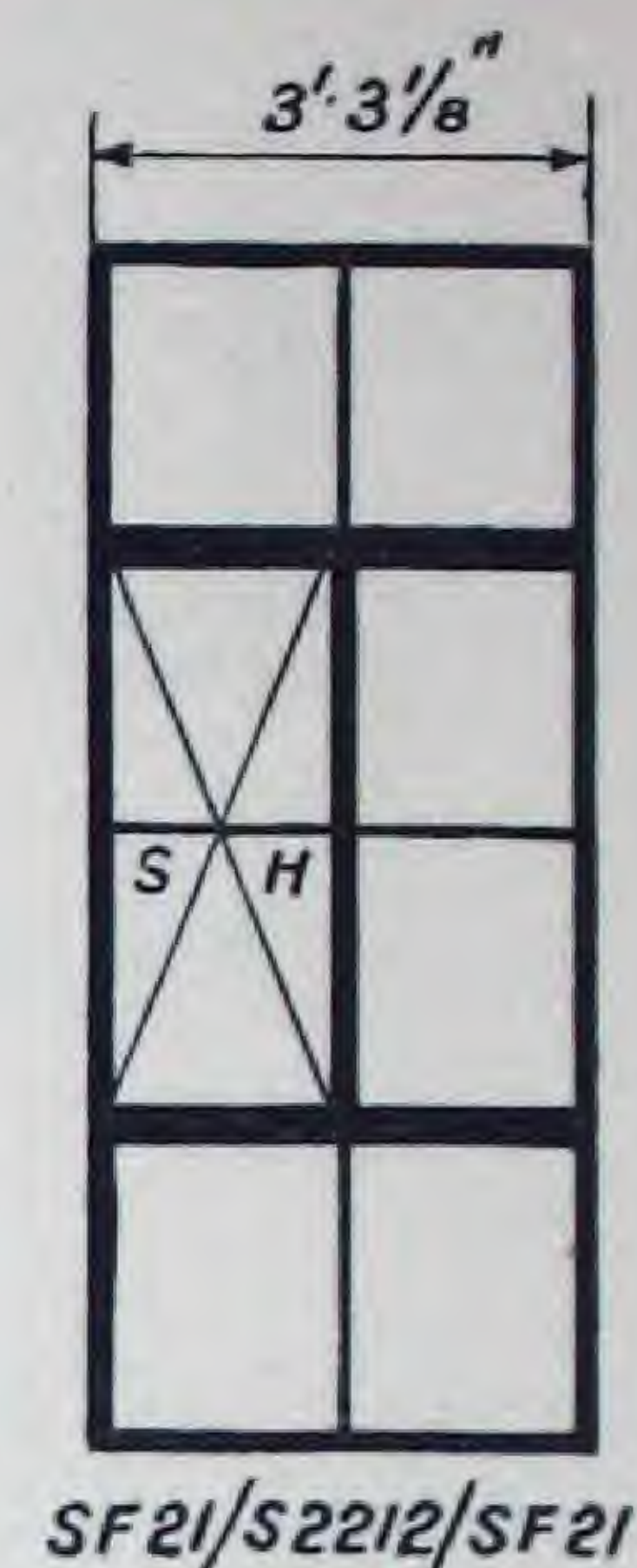
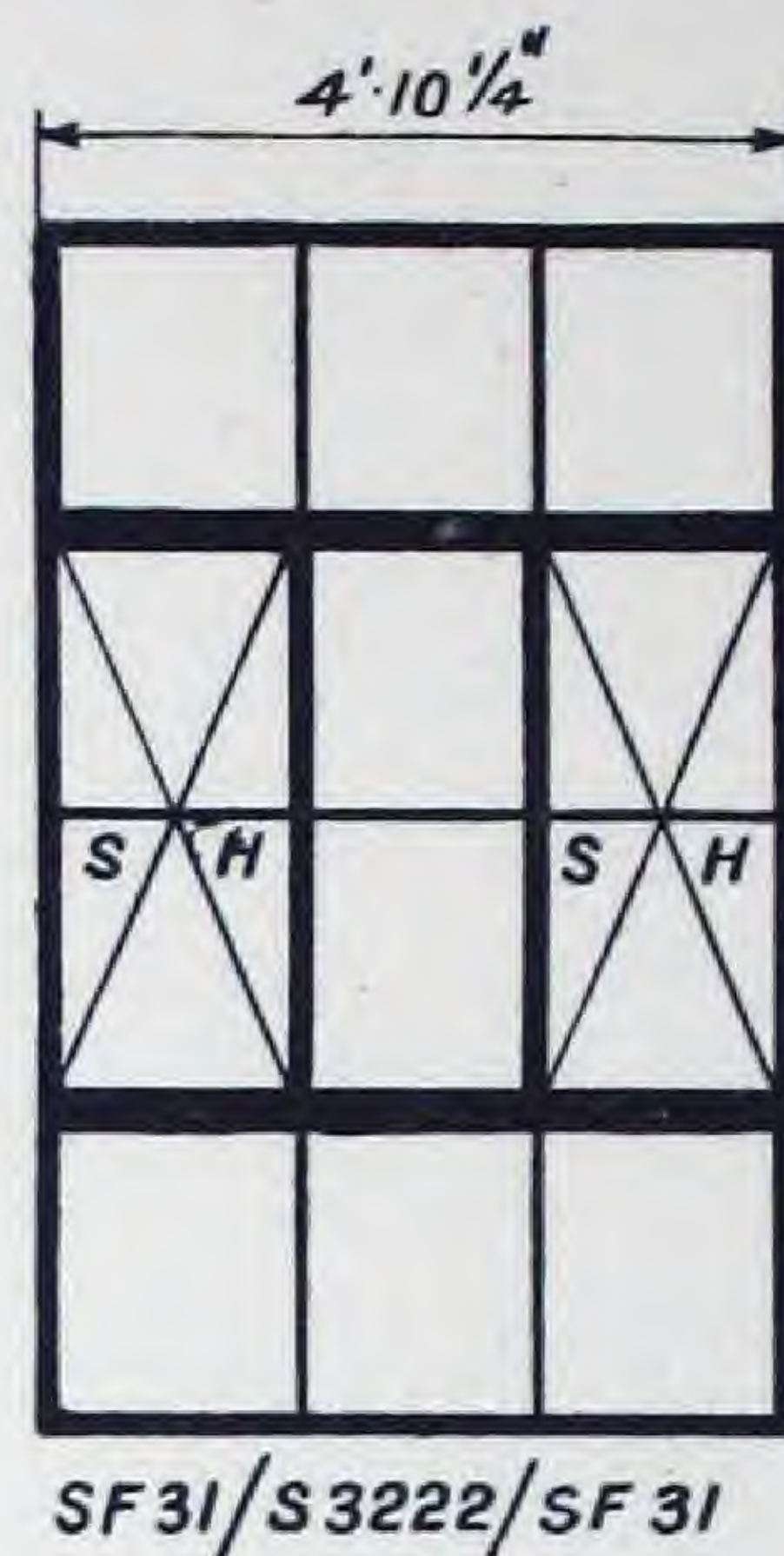
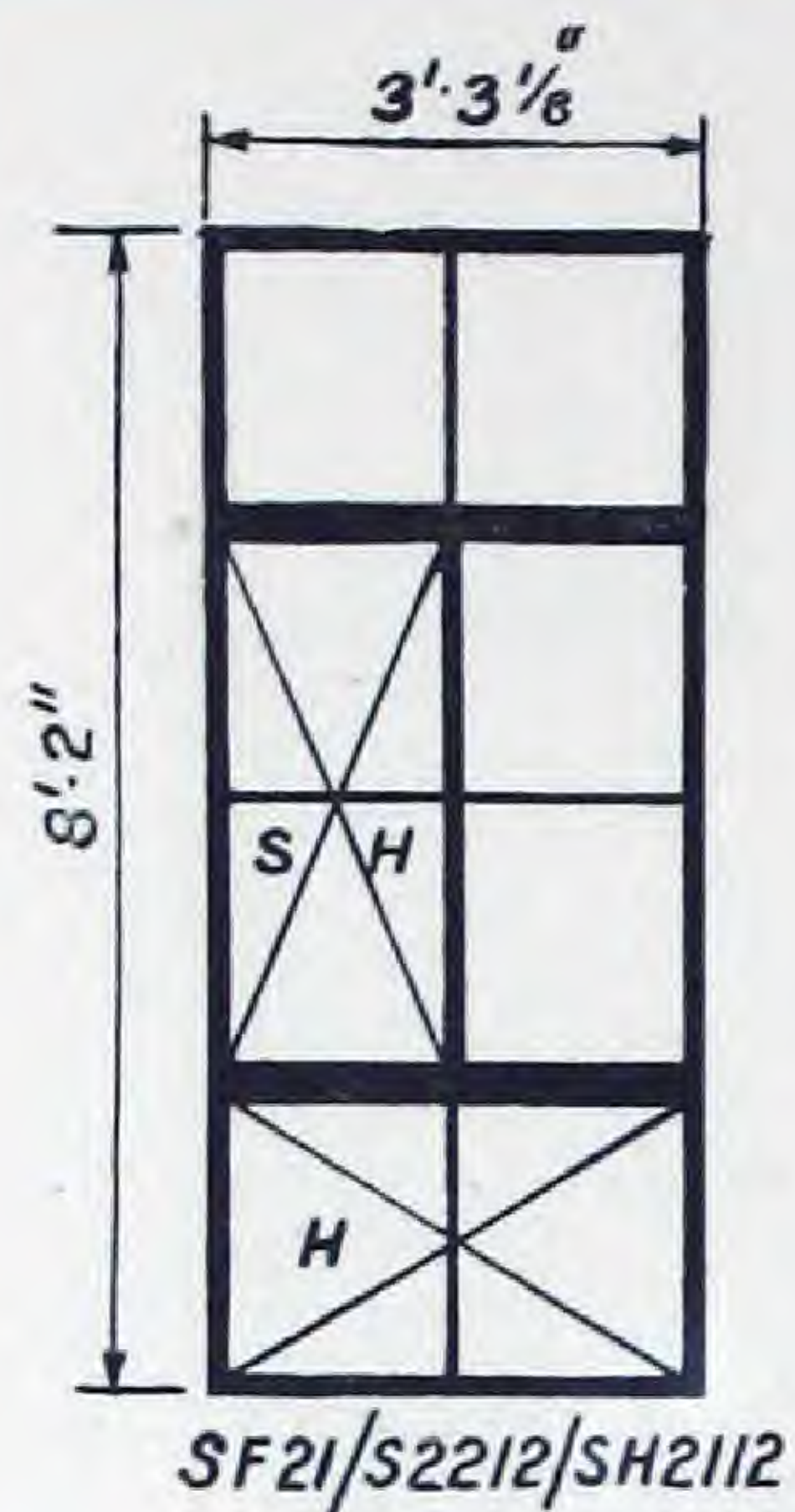
SECTION THROUGH
TRANSOME SHOWING
COUPLING BAR



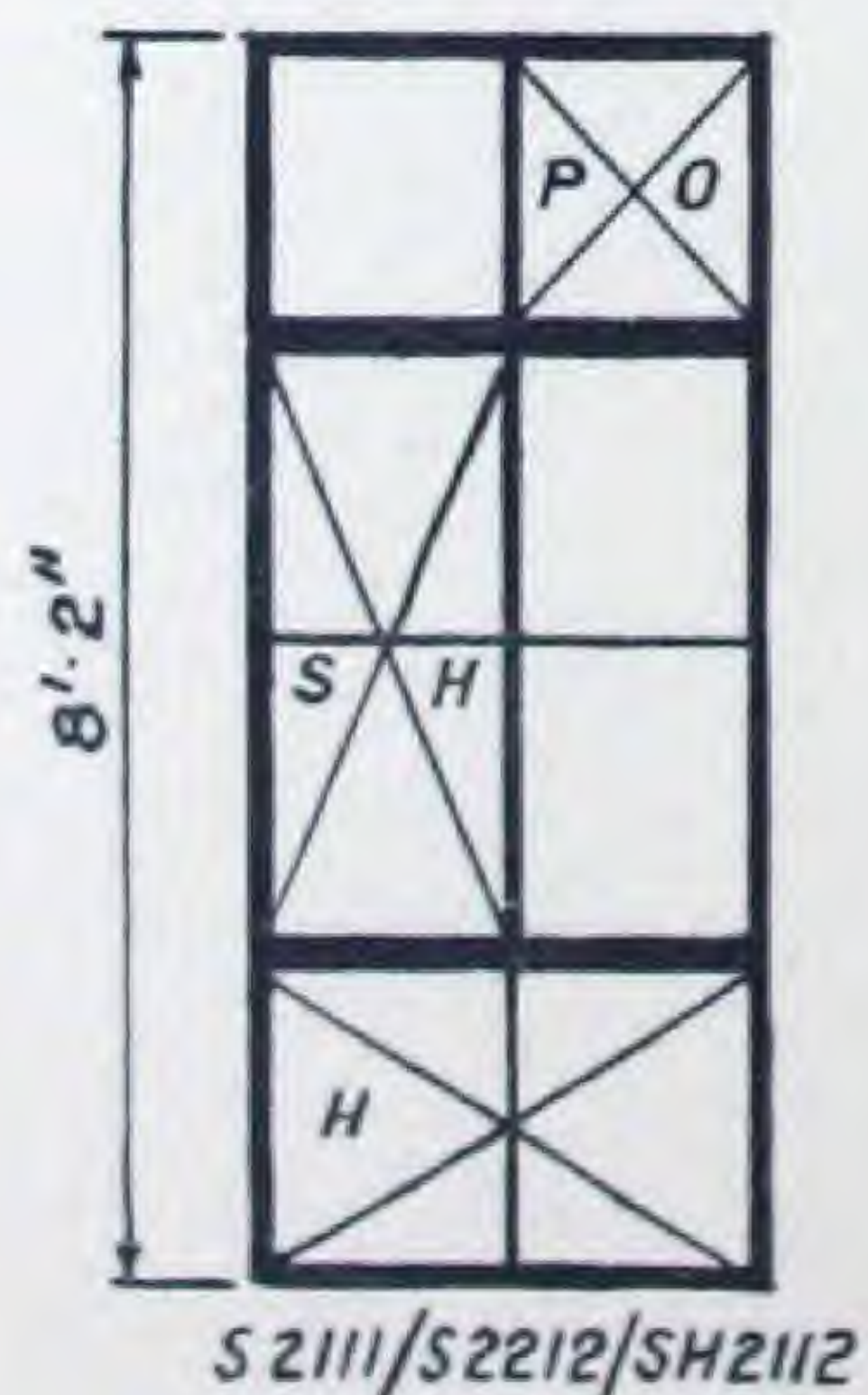
SECTION
THROUGH
JAMB OF
SIDE HUNG
CASEMENT



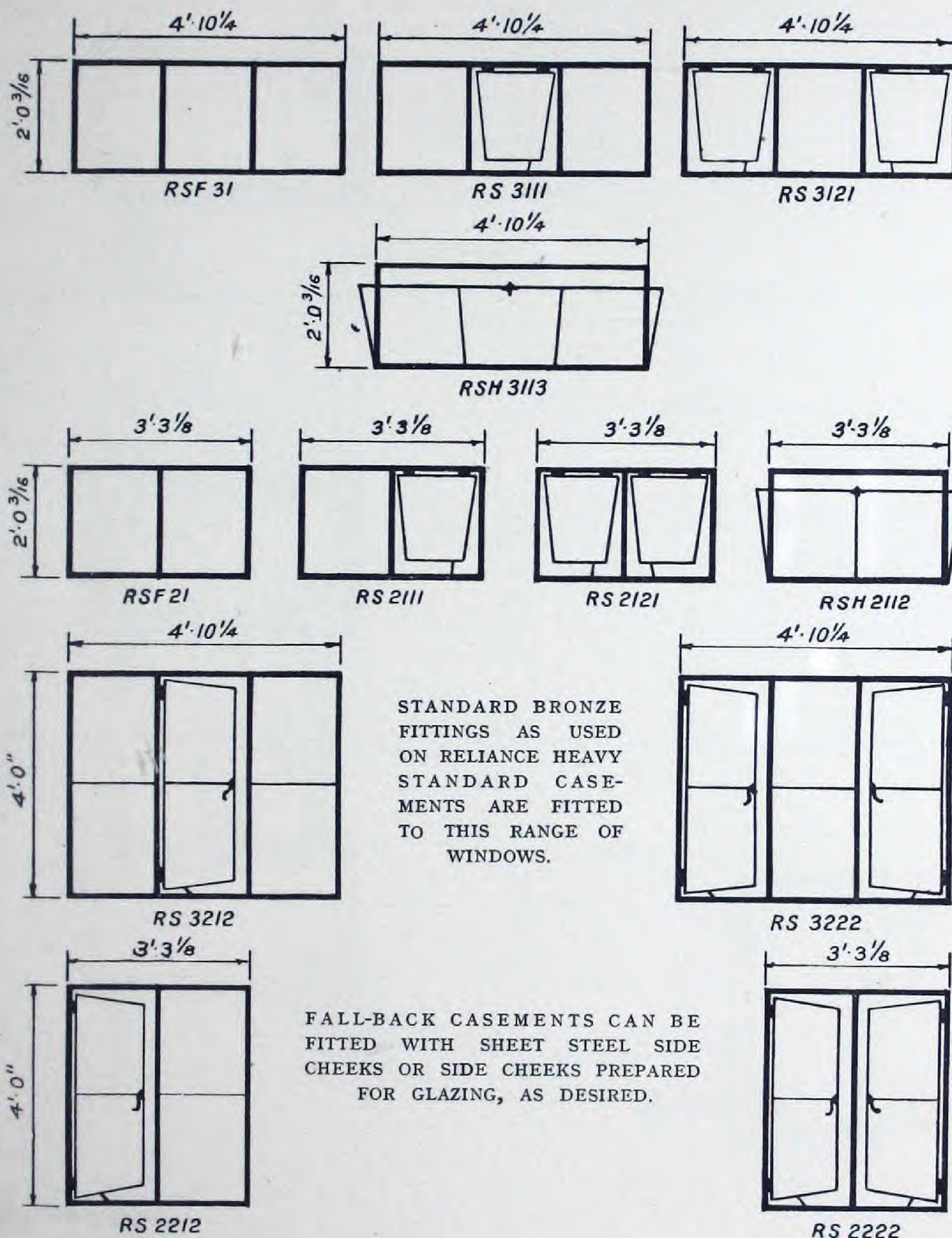
COUPLED TYPES



THE EXAMPLES OF COUPLED TYPES SHOWN ON THIS PAGE ARE MADE UP FROM THE UNITS SHOWN ON PAGE 94, CONSTRUCTED IN SECTION SERIES 100, AND ALSO FROM THE UNITS SHOWN ON PAGE 97, CONSTRUCTED IN OUR RELIANCE UNIVERSAL SECTIONS, SERIES 400



TYPES AND SIZES



NOTE.

THE WHOLE OF THIS RANGE OF WINDOWS IS ALSO MADE IN LIGHTER SECTIONS, SERIES 100, TYPES AND SIZES BEING SHOWN ON PAGE 94.

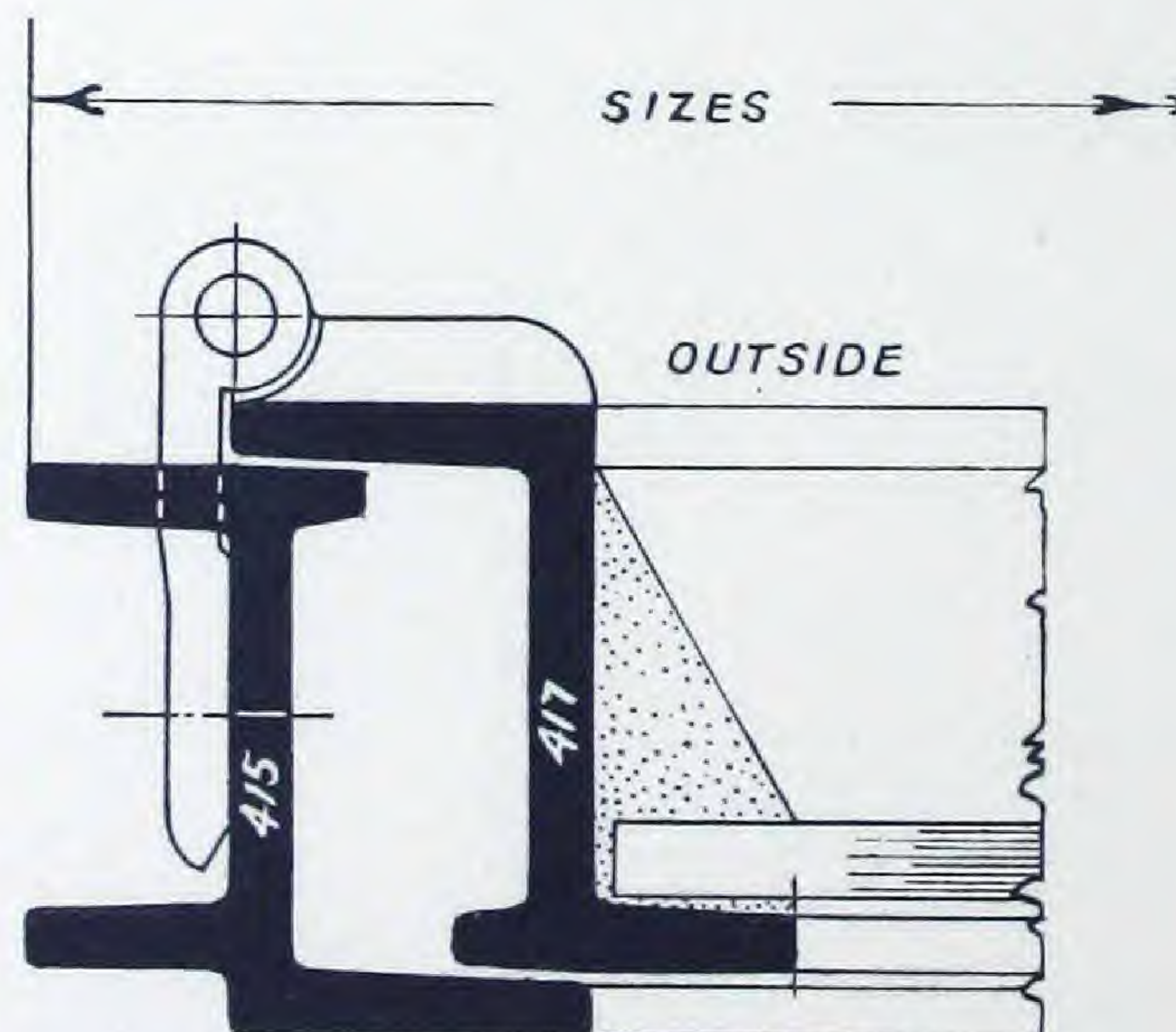
A FEW SUGGESTED METHODS OF COUPLING BOTH THESE RANGES OF WINDOWS ARE SHOWN ON PAGE 96.

FULL SIZE DETAILS

WEATHER BAR AT
SLIGHT EXTRA COST

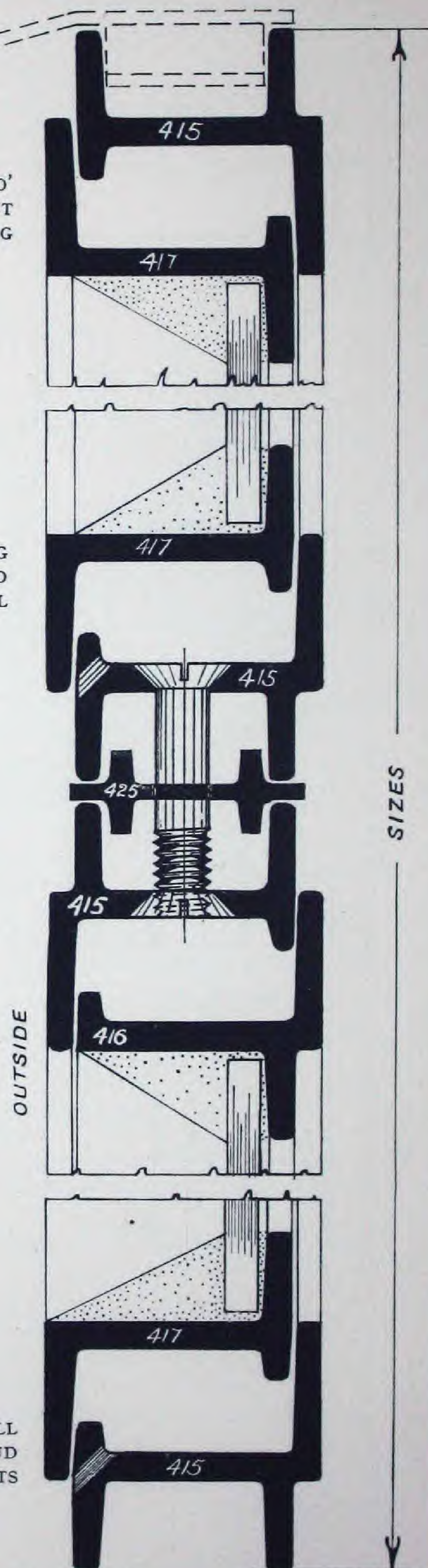
SECTION THRO'
HEAD OF PUSH-OUT
AND SIDE HUNG
CASEMENTS

DETAIL OF TRANSOME, SHOWING
METHOD OF COUPLING STANDARD
UNITS BY MEANS OF THE SPECIAL
COUPLING BAR

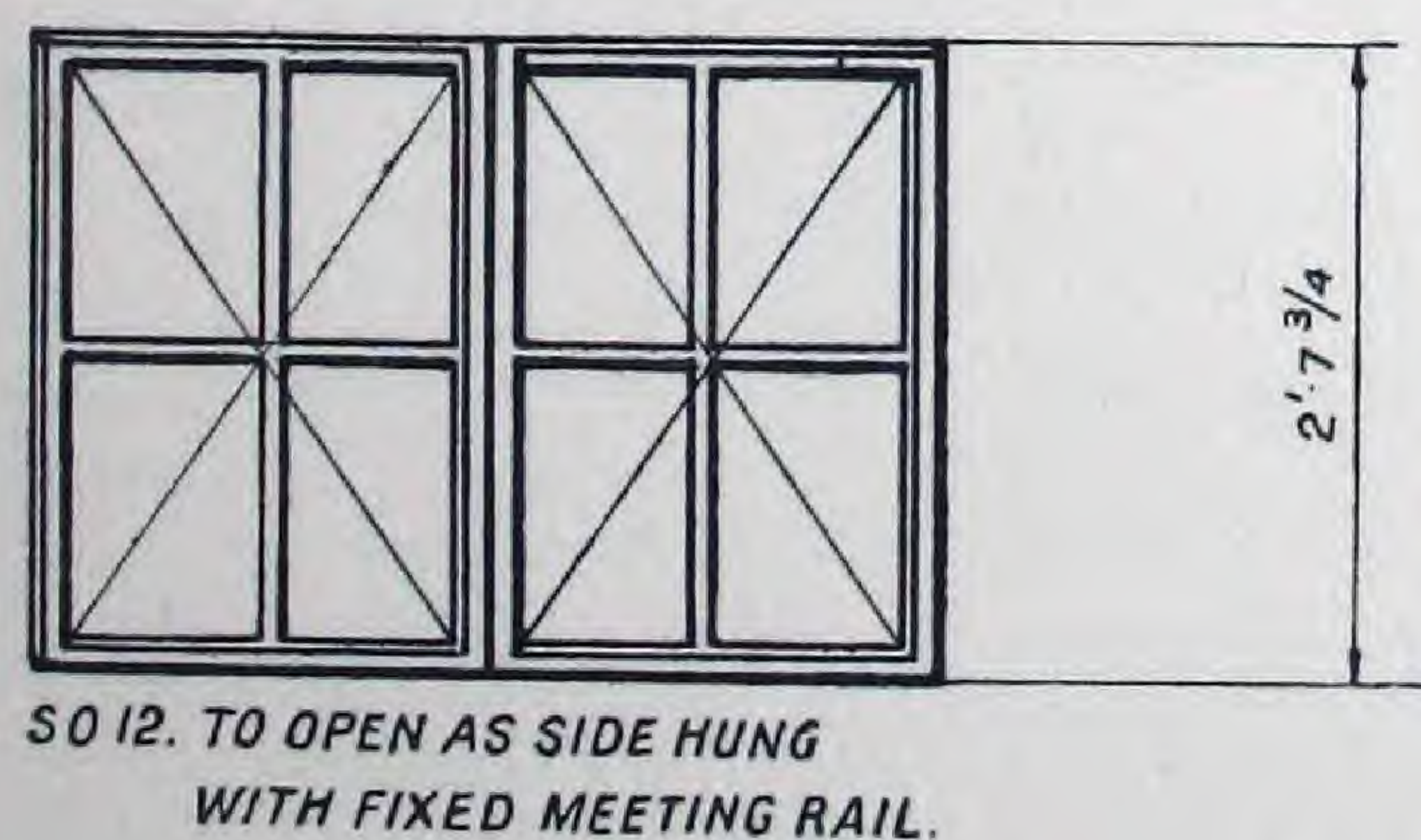
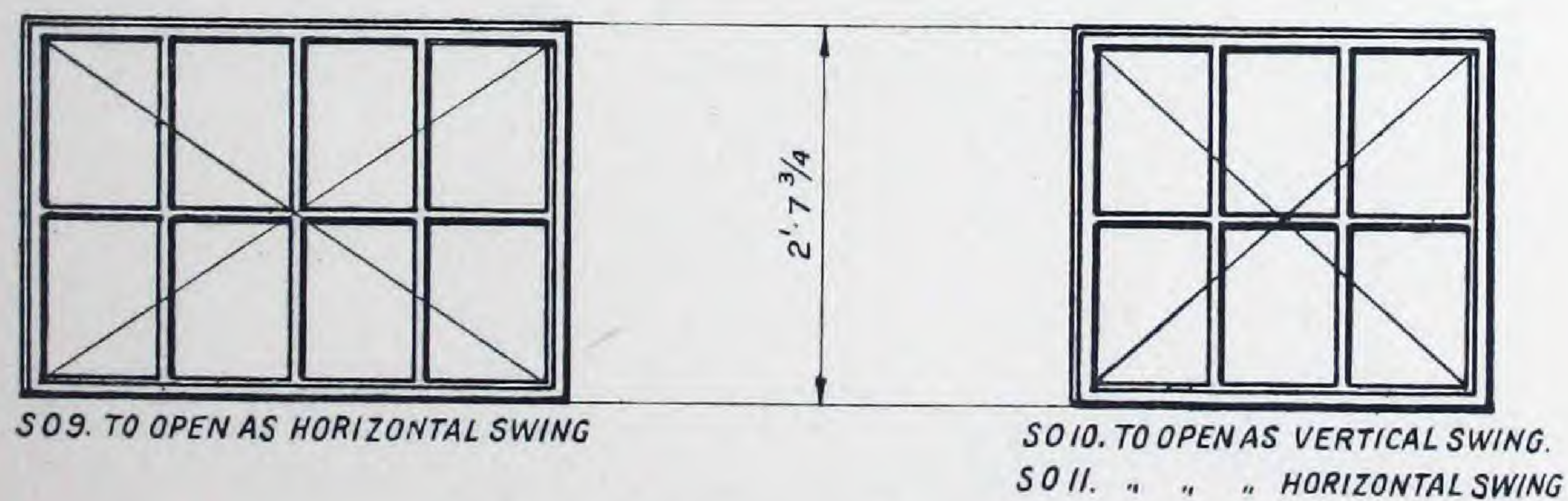
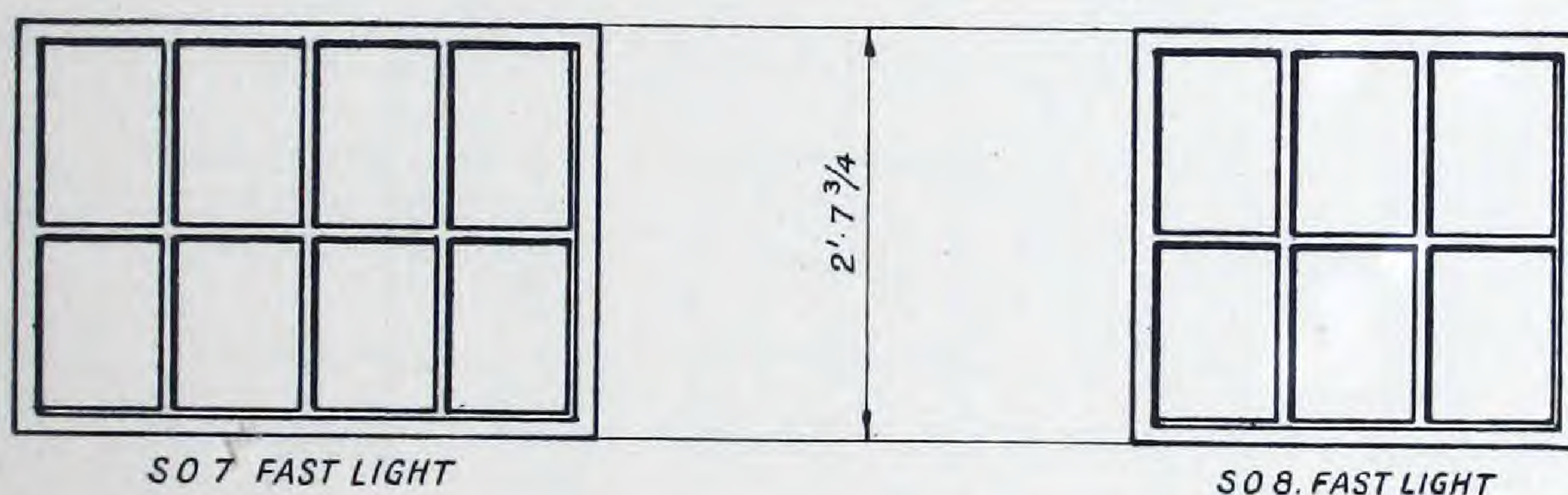
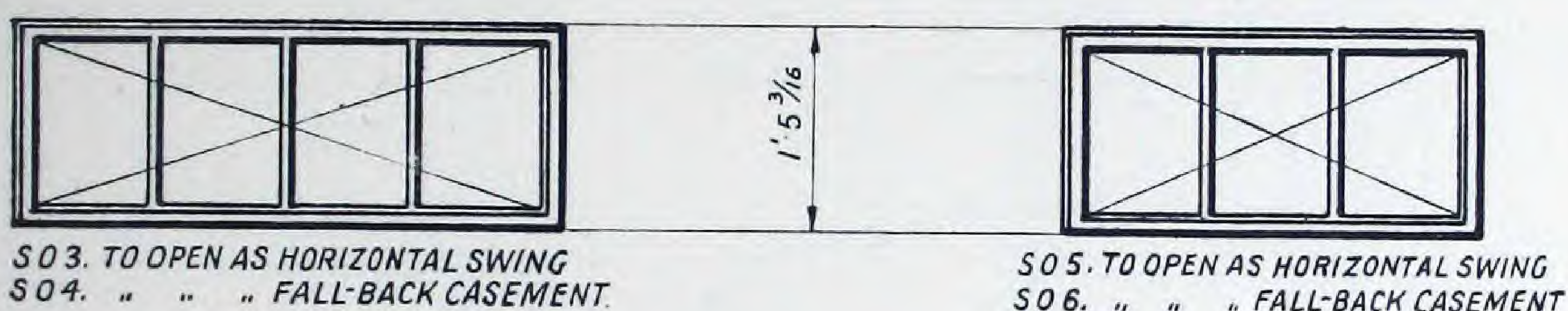
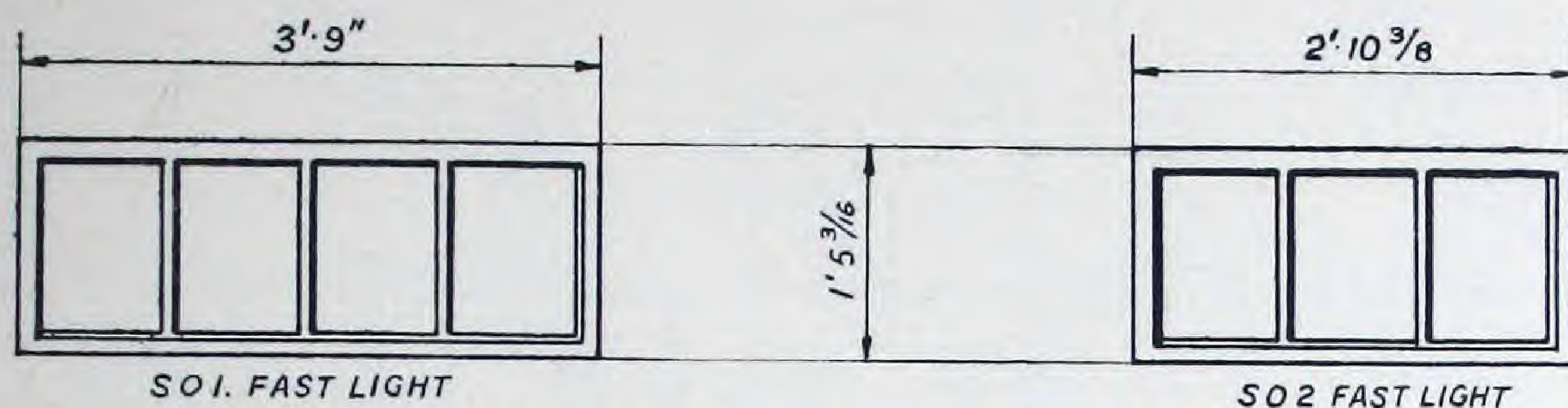


SECTION THRO' JAMB OF
SIDE HUNG CASEMENTS

SECTION THRO' CILL
OF SIDE-HUNG AND
PUSH-OUT CASEMENTS

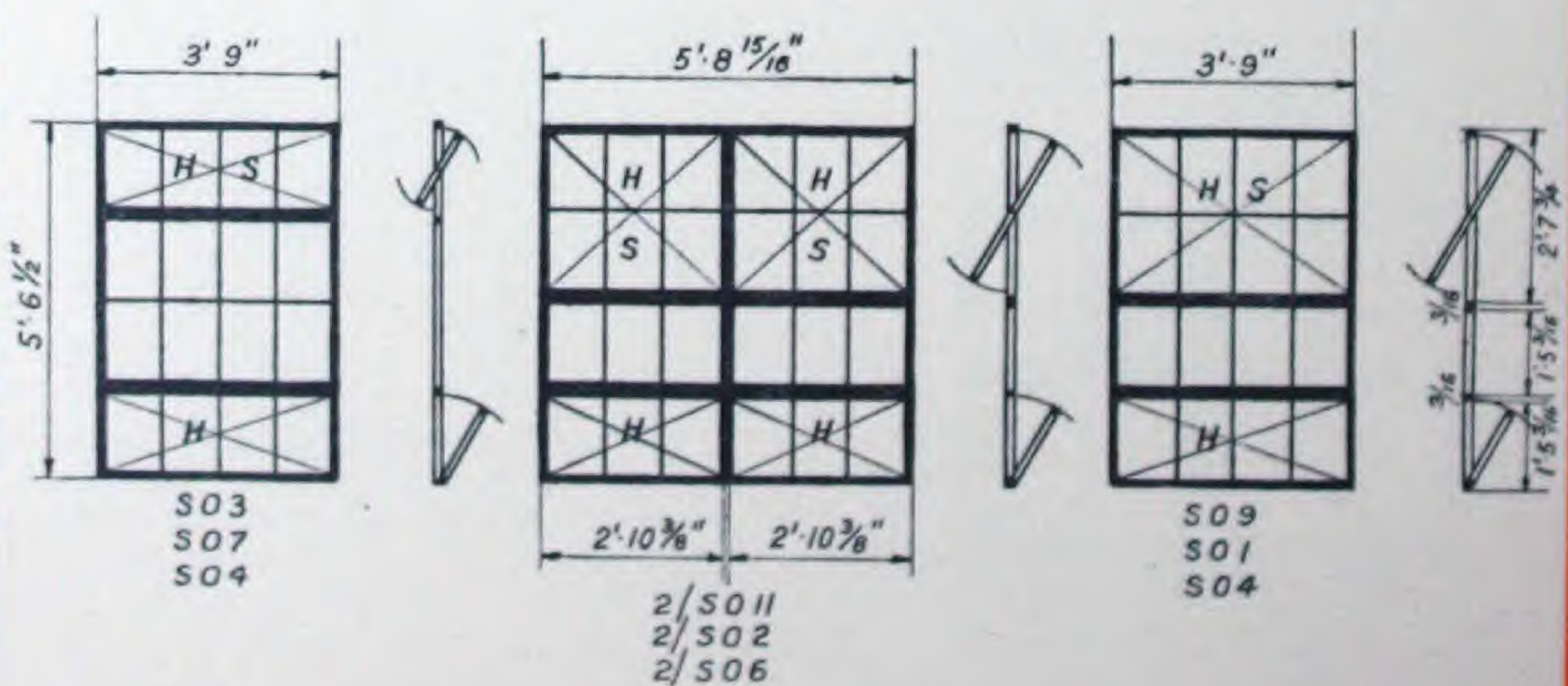
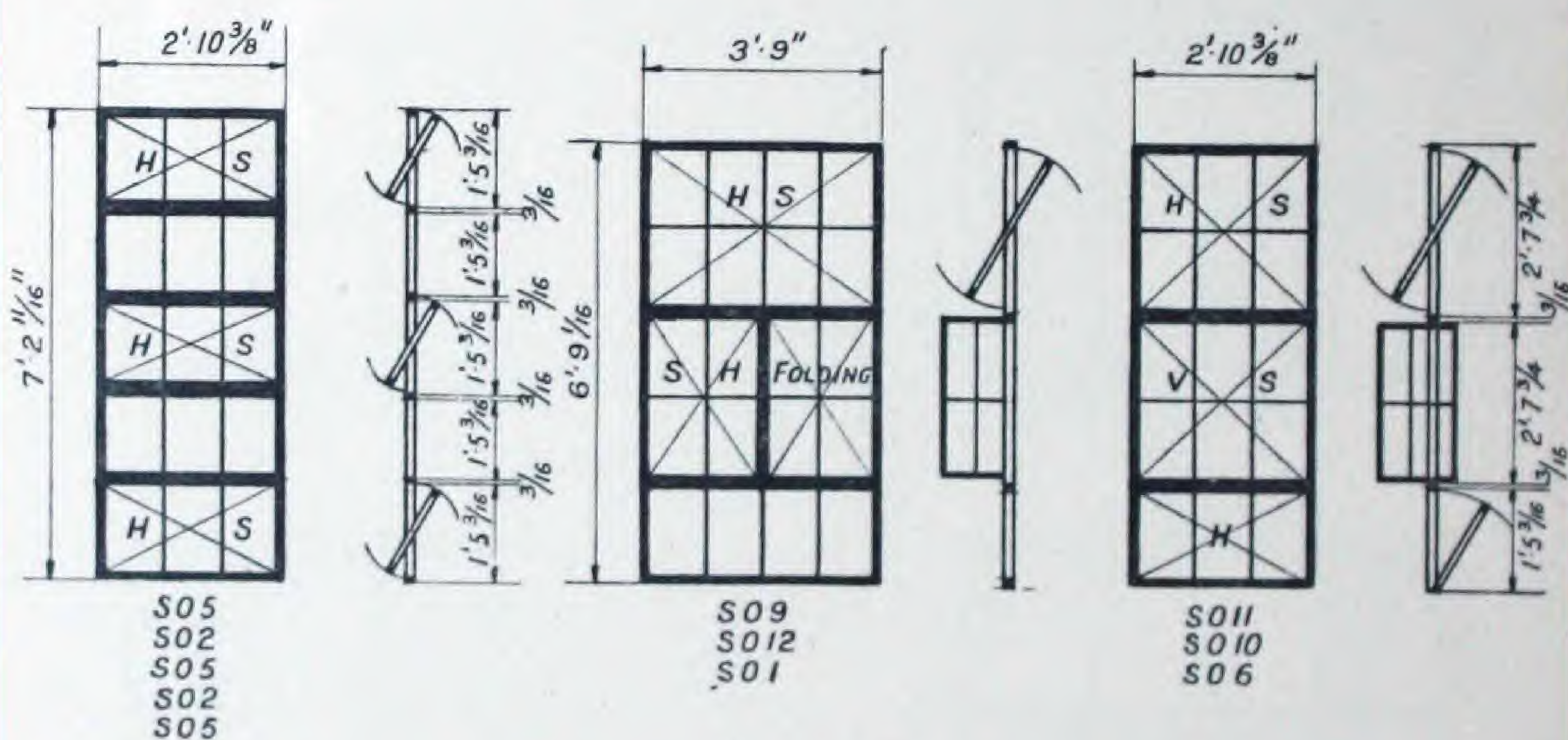
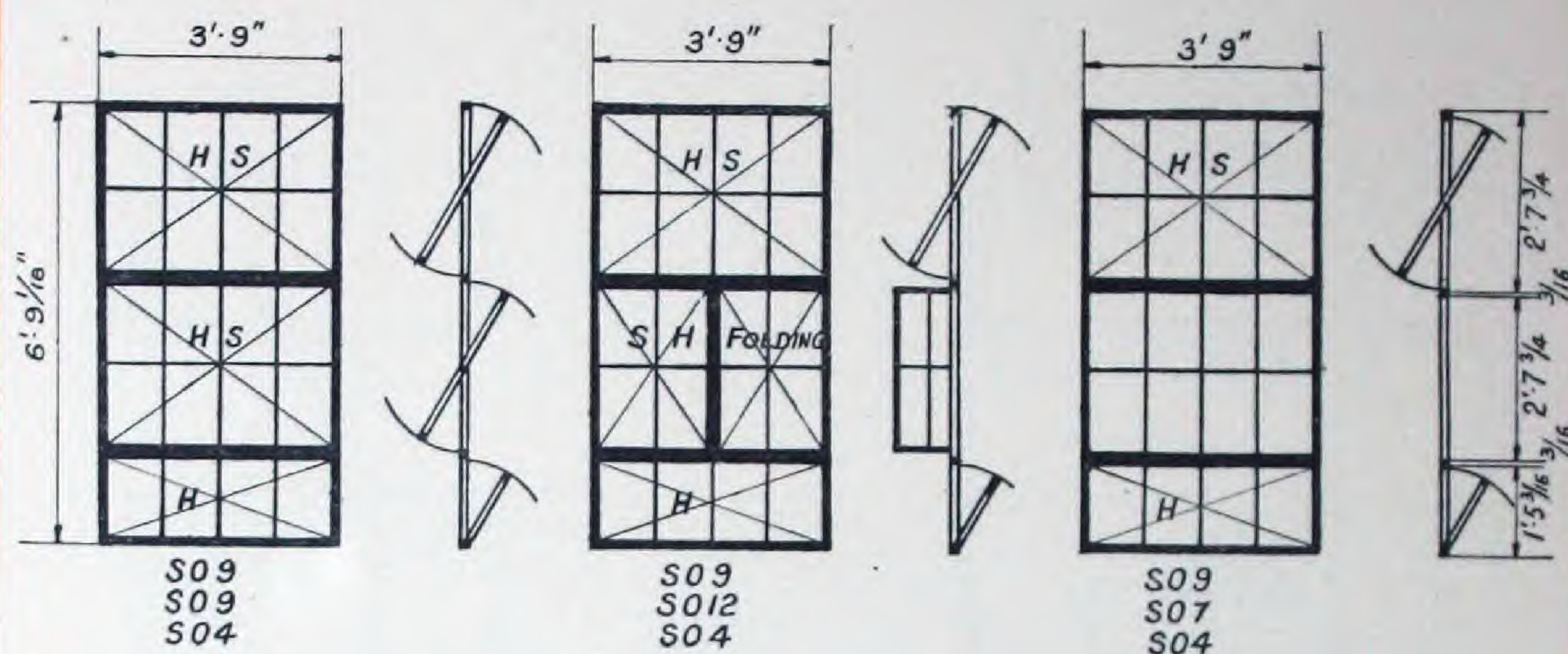


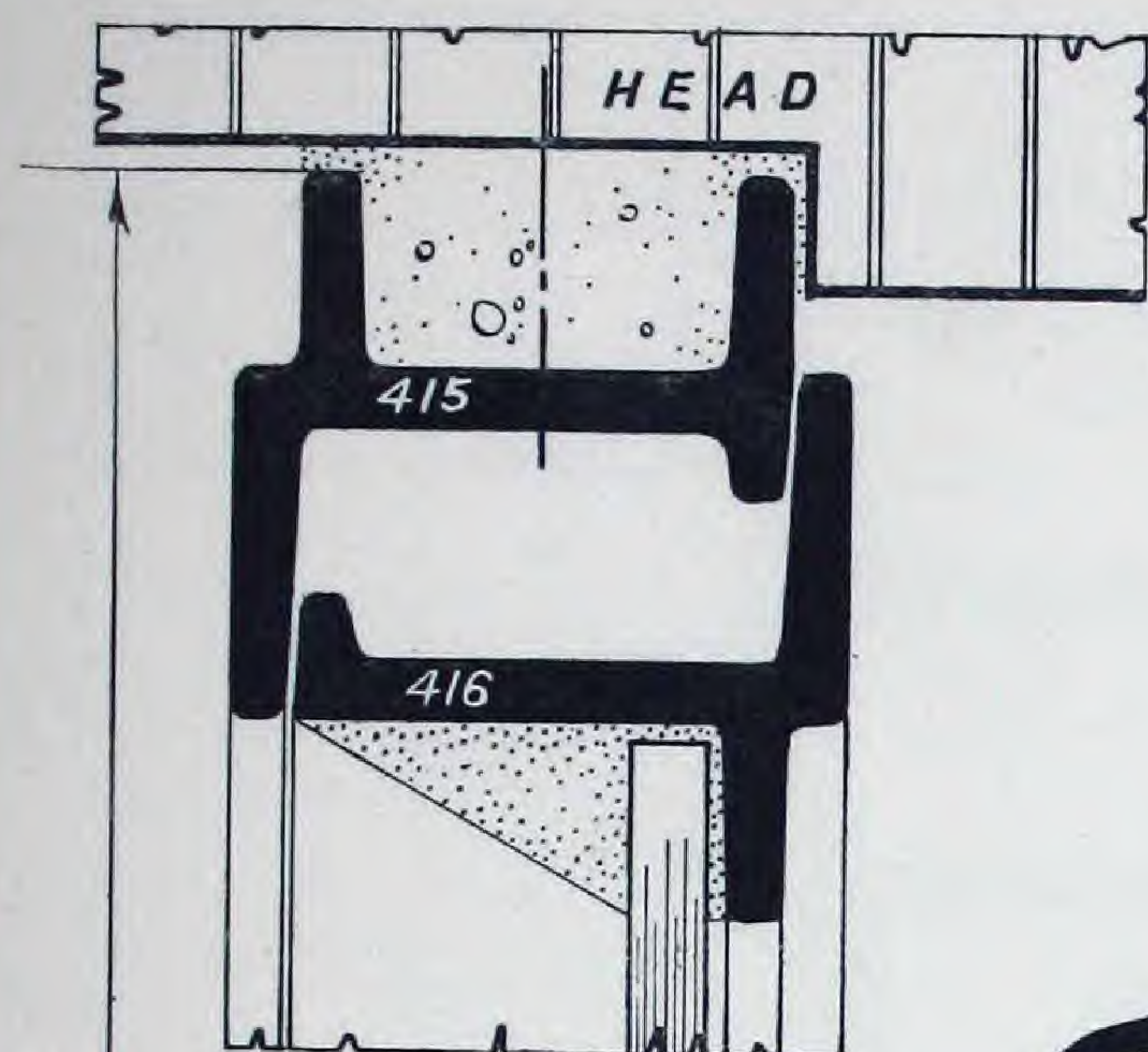
TYPES AND SIZES



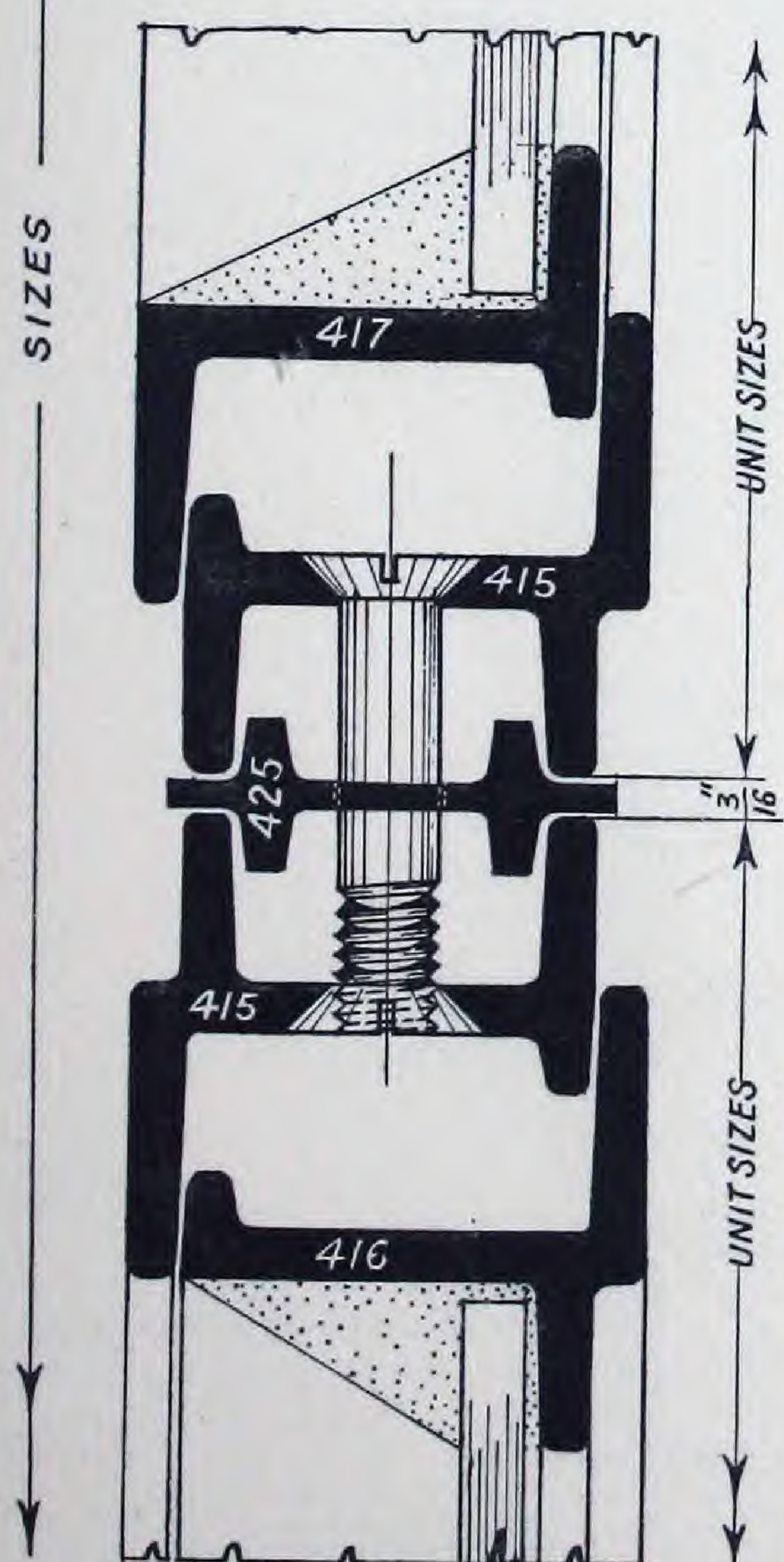
ALTERNATIVE DESIGNS FOR SIDE CHEEKS
TO FALL-BACK CASEMENTS. SUPPLIED
EITHER IN SHEET METAL, OR FOR GLASS.

COUPLED TYPES

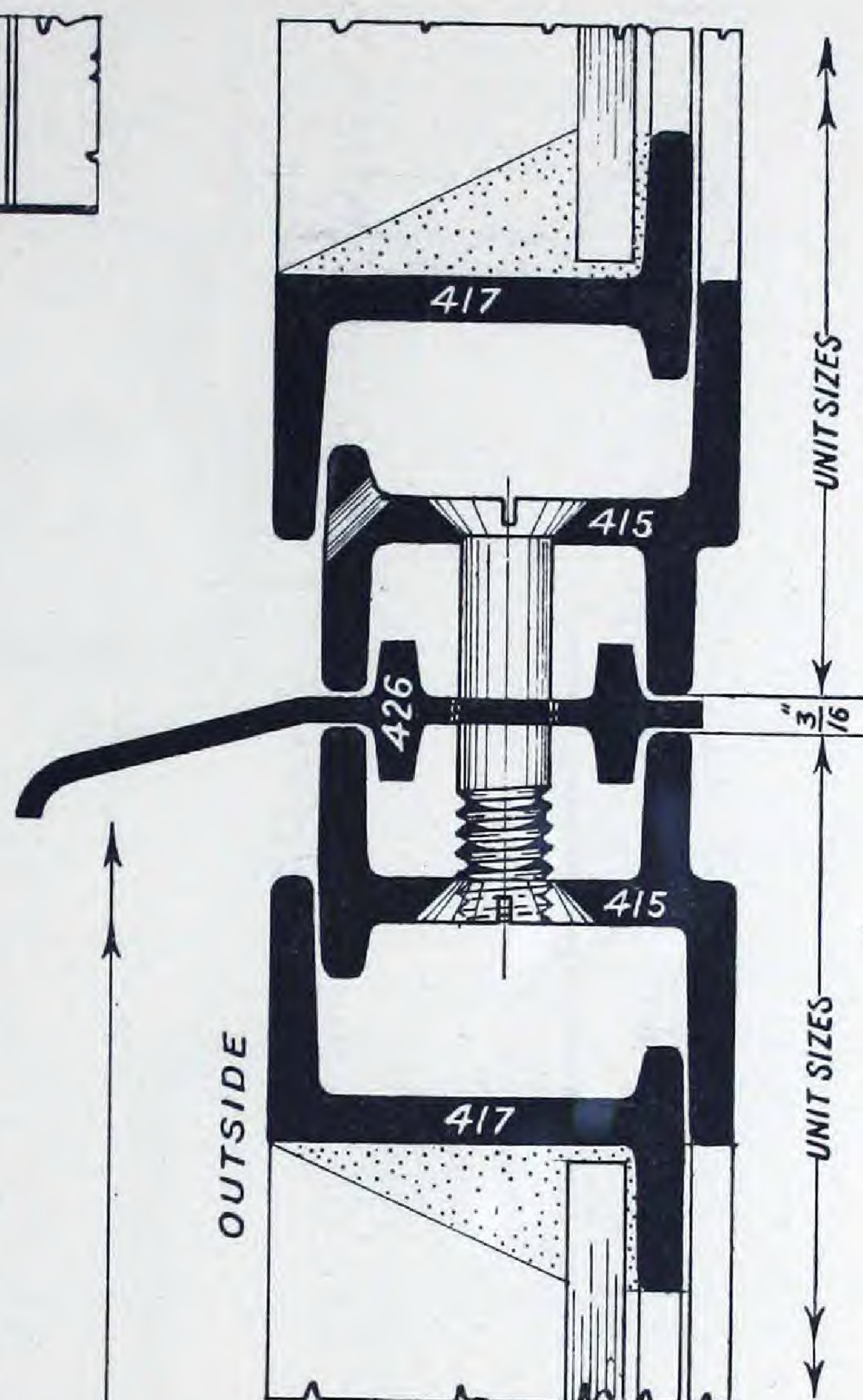




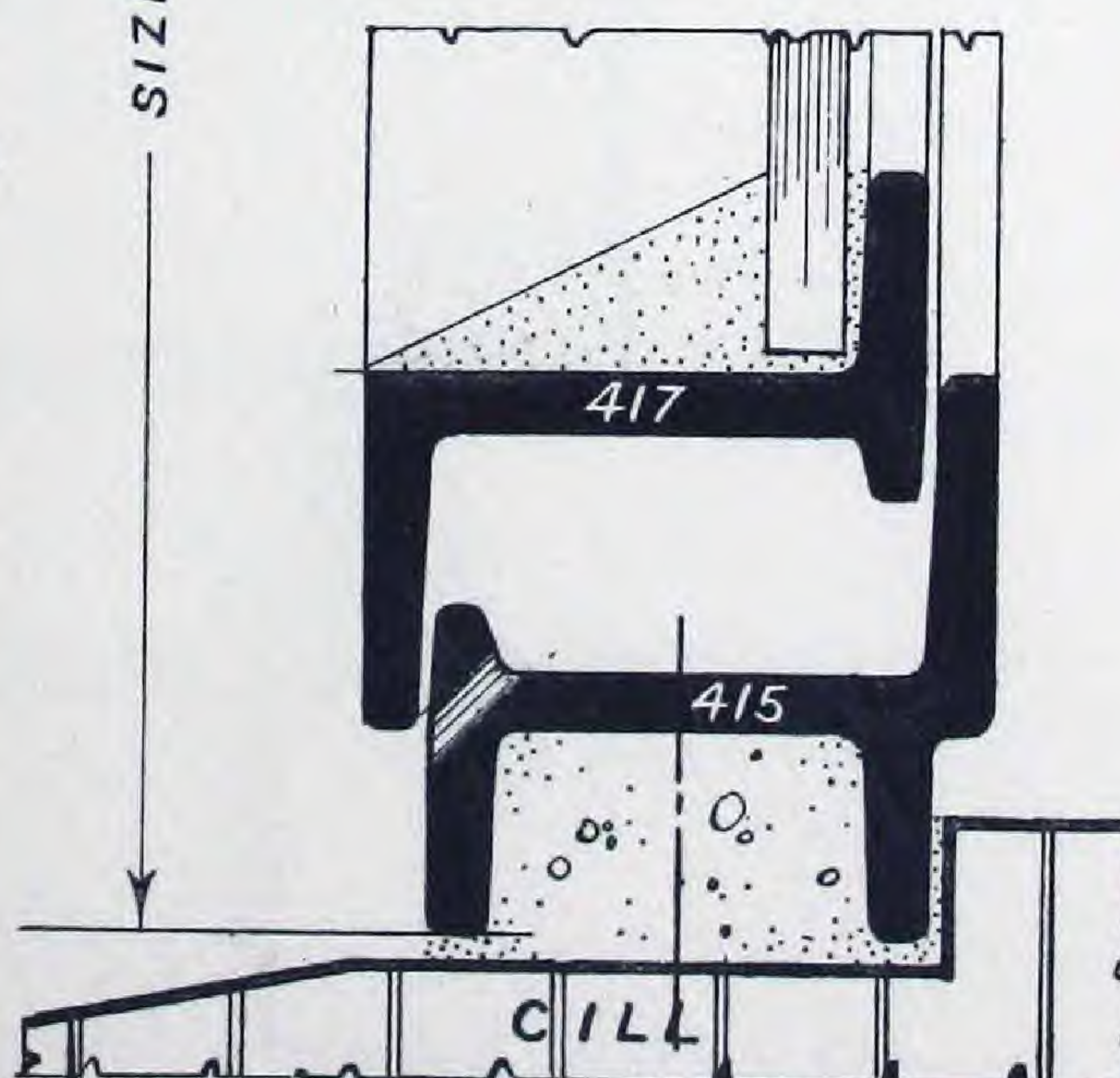
SECTION THROUGH HEAD
OF HORIZONTAL SWING



SECTION THROUGH TRANSOME
BETWEEN TWO HORIZONTAL
SWING CASEMENTS

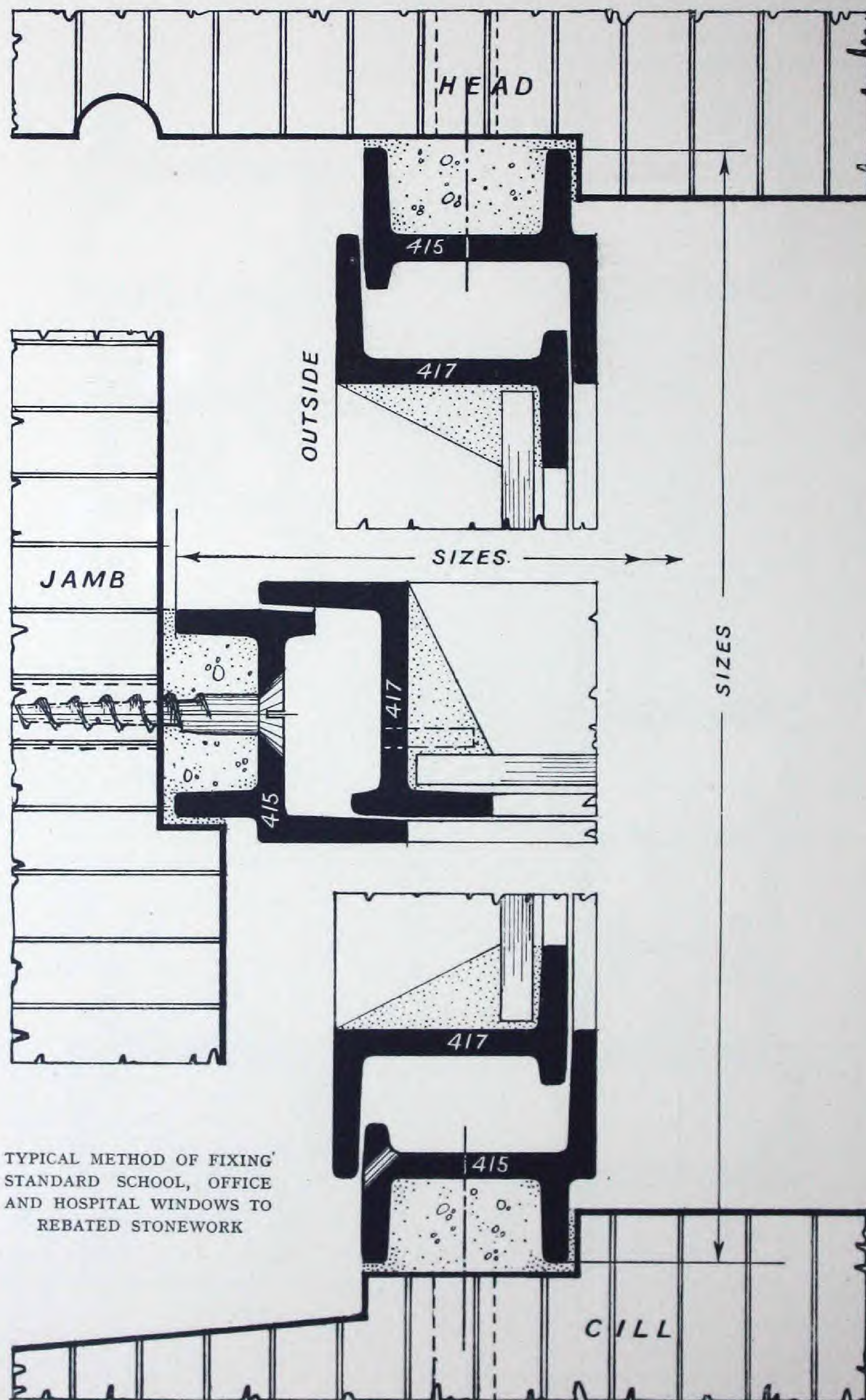


SECTION THROUGH TRANSOME
BETWEEN HORIZONTAL SWING
AND SIDE HUNG CASEMENTS



SECTION THROUGH CILL
OF SIDE HUNG CASEMENTS

GENERAL FIXING DETAILS



TYPICAL METHOD OF FIXING
STANDARD SCHOOL, OFFICE
AND HOSPITAL WINDOWS TO
REBATED STONEWORK

Owing to the increasing demand for a
STANDARD HOSPITAL WINDOW
OF THE
BALANCE TYPE

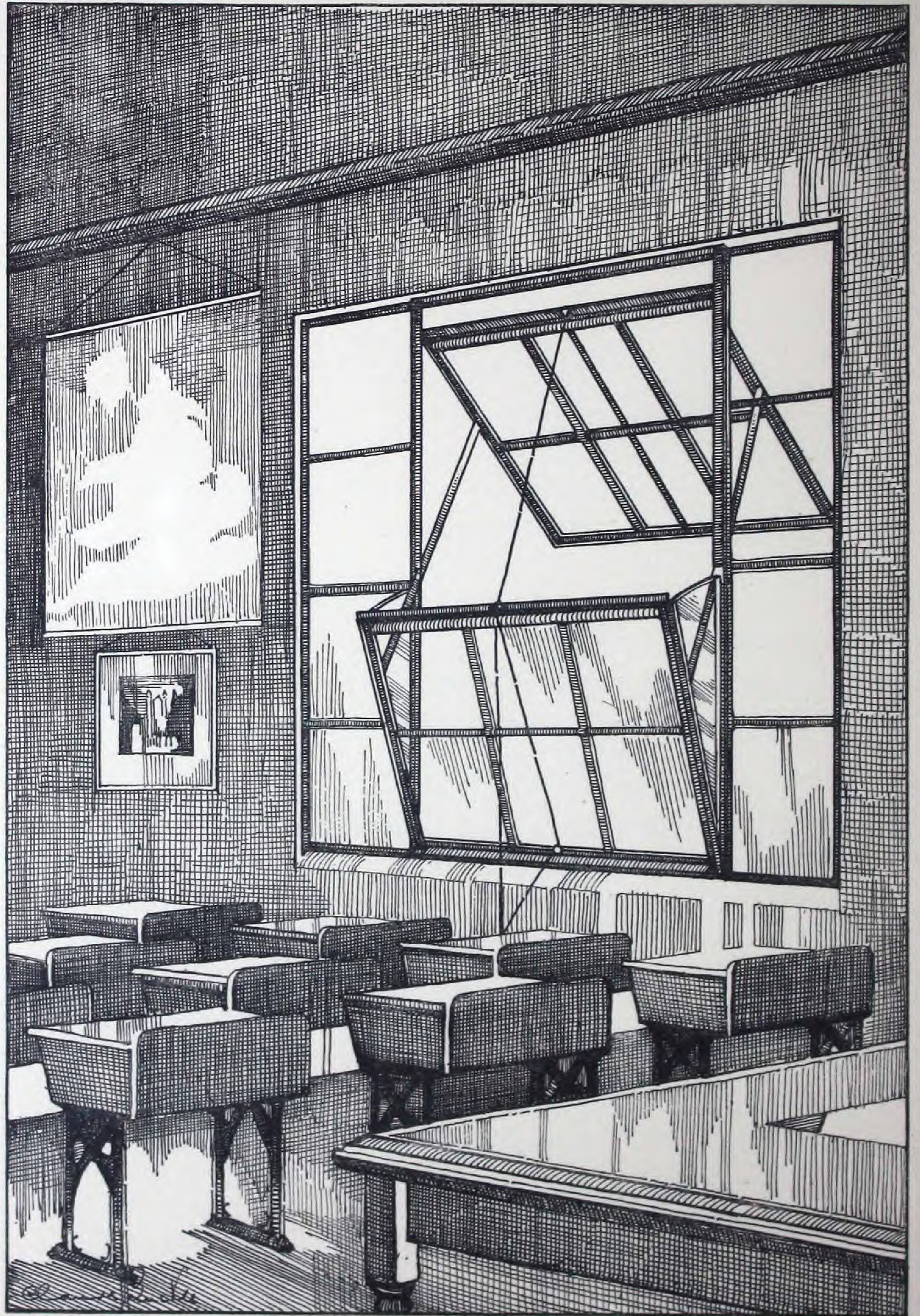
we have produced the Reliance Georgian Window (British Patent 256146/26), in standard sizes. Types and sizes together with full size details are shown on the following pages.

The production of these Windows as Standard considerably decreases the cost, although all the exclusive features of Reliance purpose-made Windows are retained in these Standard products.

The design and construction of Reliance Standard Hospital Windows enables maximum ventilation to be obtained without draught, and at the same time gives a very distinctive appearance.

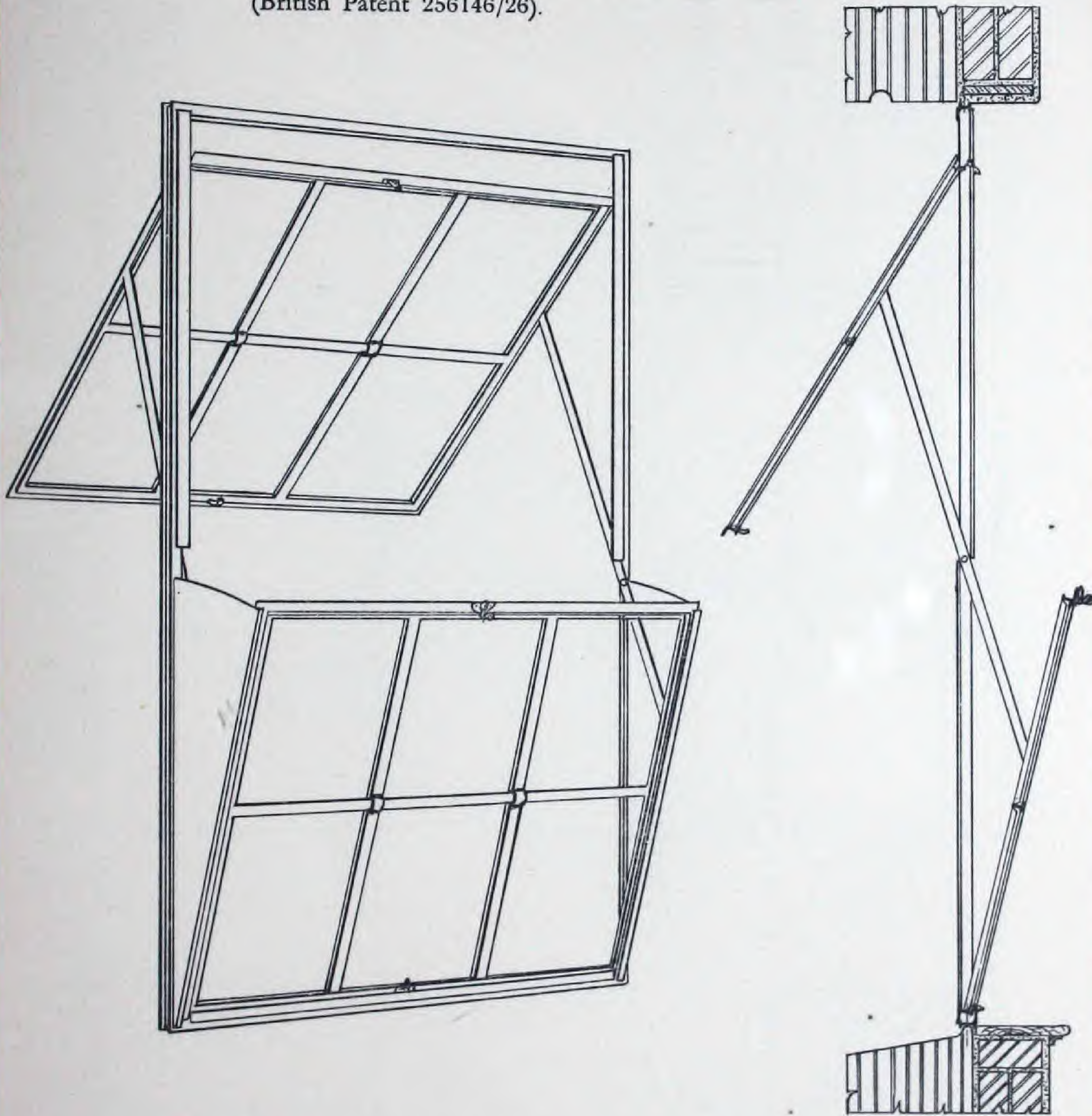
These Windows are designed to be used in conjunction with Standard School and Office Windows, type SO, the overall width sizes being the same. By the use of special coupling bars these Windows can be coupled together vertically, ensuring a structurally strong and weather-proof Window.

BALANCE
TYPE
WINDOW



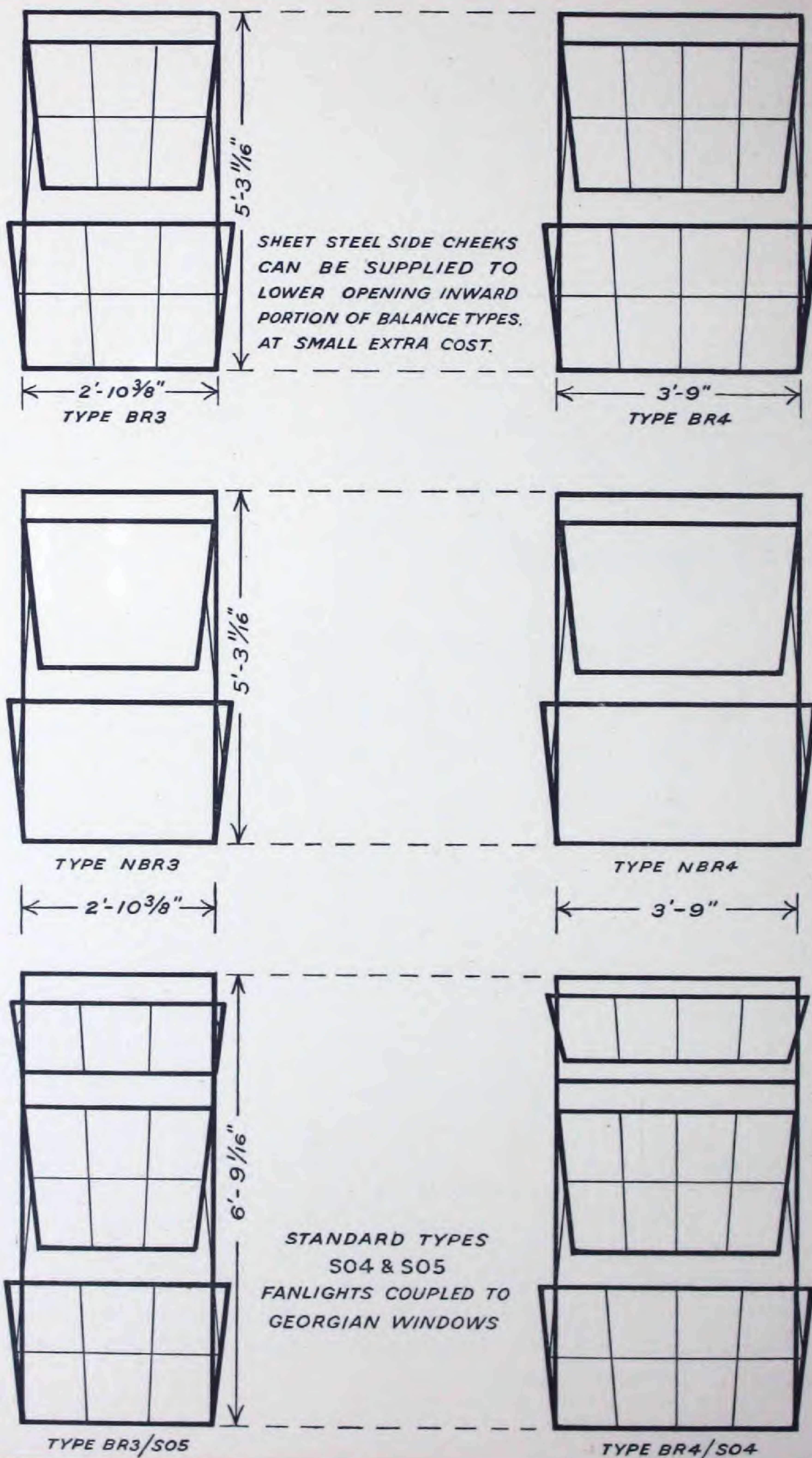
Reliance Georgian Window

(British Patent 256146/26).

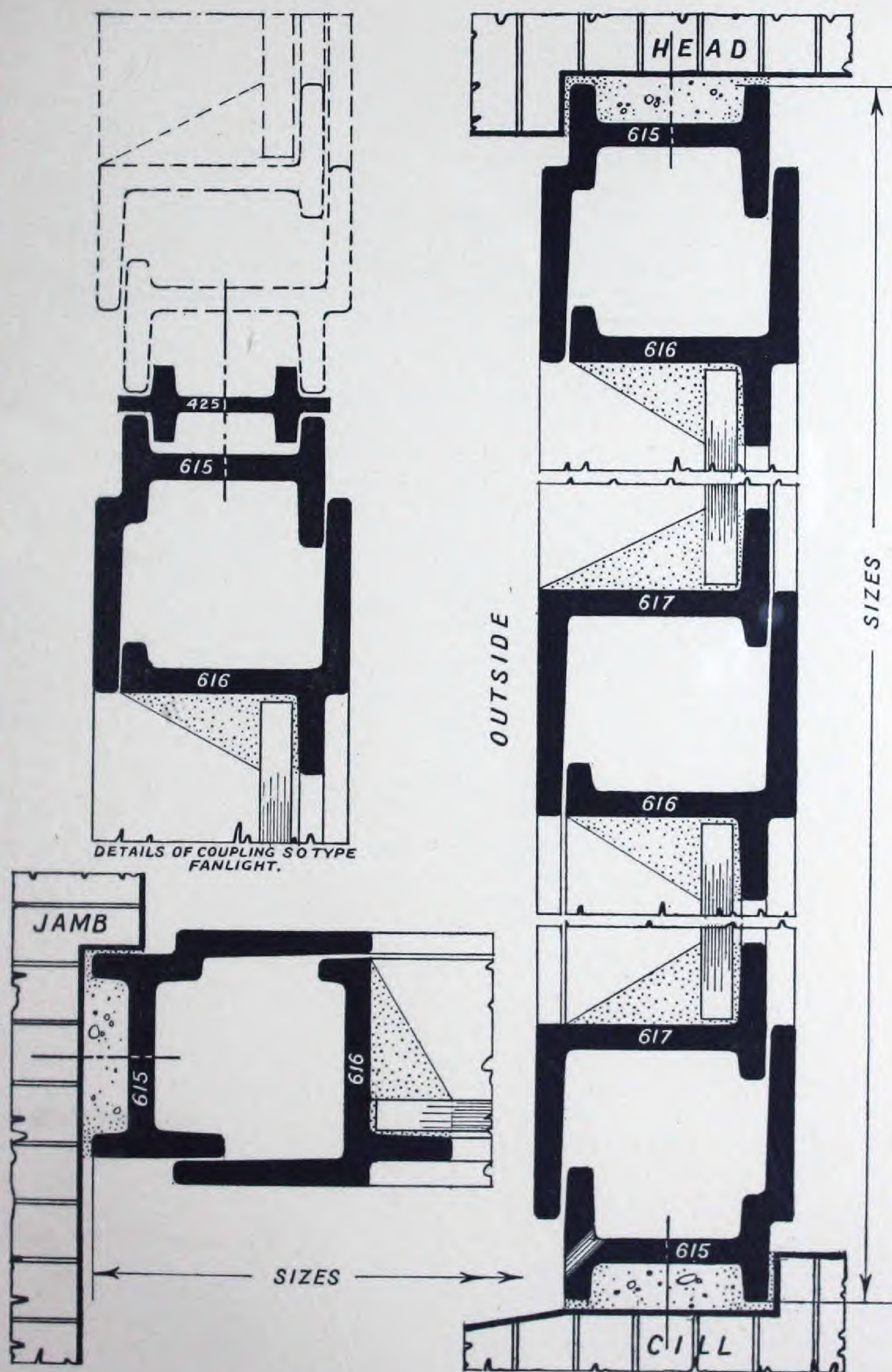


Particularly in hospitals and schools, complete Ventilation is vital, yet with ordinary windows it is often impossible owing to the creation of draughts. The window shown above completely surmounts this difficulty. Incoming air is deflected towards the ceiling and the exhausted air is forced out through the space at the top of the window. This space increases as the main window is opened and in whatever position the window is placed the space for incoming air is in correct proportion to the space for outgoing air, thus ensuring the complete removal of exhausted air.

TYPES AND SIZES



FULL SIZE DETAILS



SPECIFICATION

Standard School, Office and Hospital Windows are constructed of Rolled Mild Steel Sections of first quality. All Bars are hydraulically straightened, scaled and cleaned, free from rust, hammer marks and rolling flaws.

Cross joints of glazing bars are locked to strengthen the points of intersection. Corners are machine mitred and electrically welded.

Casements are double weathered at all points, the weathering is solid with the frames and not obtained by the use of welded or screwed on fillets or strips.

All steel-work painted one coat of best grey anti-corrosive, weather-resisting paint before despatch.

SCHOOL & OFFICE WINDOWS TYPE S. PAGE 94.

All S Type Windows are constructed in Reliance Sections, series 100.

Side, top and bottom hung Casements hung on heavy steel hinges with $\frac{3}{8}$ -in. diameter Bronze pins. Side hung Casements open outwards, all types made to glaze from the outside.

Side hung Casements fitted with solid malleable Iron Handle, Pegstay, Pin and Rest.

Top hung Casements fitted with solid malleable Iron Pegstay, Pin and Rest.

All fittings have Bronze working parts.

All windows are provided with $\frac{5}{16}$ -in. diameter counter-sunk fixing holes or supplied with lugs for building in, as required.

SCHOOL & OFFICE WINDOWS TYPES R.S. & S.O. PAGES 97 & 99.

All windows in the above types are constructed in Reliance Universal Sections, series 400.

Side and top hung Casements provided with solid Bronze Handle and Pegstay, Pin and Rest.

Vertically pivoted Casements fitted with solid Bronze Handle and Sliding Stay.

Horizontal Swing and bottom hung Casements provided with solid Bronze spring Catch for cord or pole operation.

Side and top hung Casements are hung on solid Bronze butts. Horizontal and vertically pivoted Casements work on solid Bronze large diameter pivots.

Coupling by the use of Reliance special mullions and transomes.

HOSPITAL WINDOWS TYPE B.R. PAGE 106.

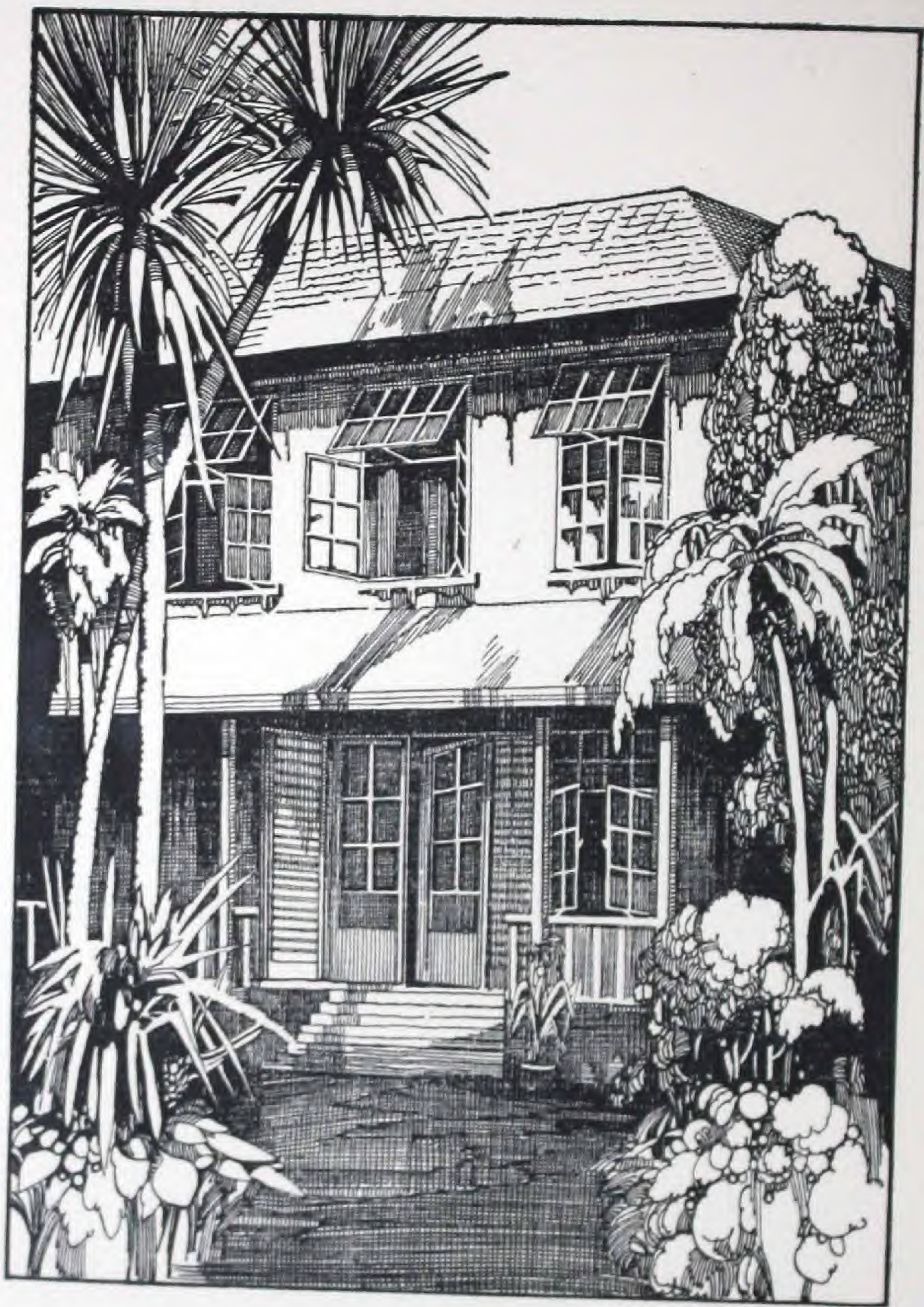
All Windows in the above types are constructed in Reliance Sections, series 600.

Casements are fitted with one pair of solid Bronze Handles for opening and lever pattern Handle and bridge for closing.

Blind fittings and pulleys can be supplied if required at slight extra cost.



STANDARD
TROPICAL
CASEMENTS



After an exhaustive study of Architectural and Building requirements in Tropical Countries, we have produced ranges of

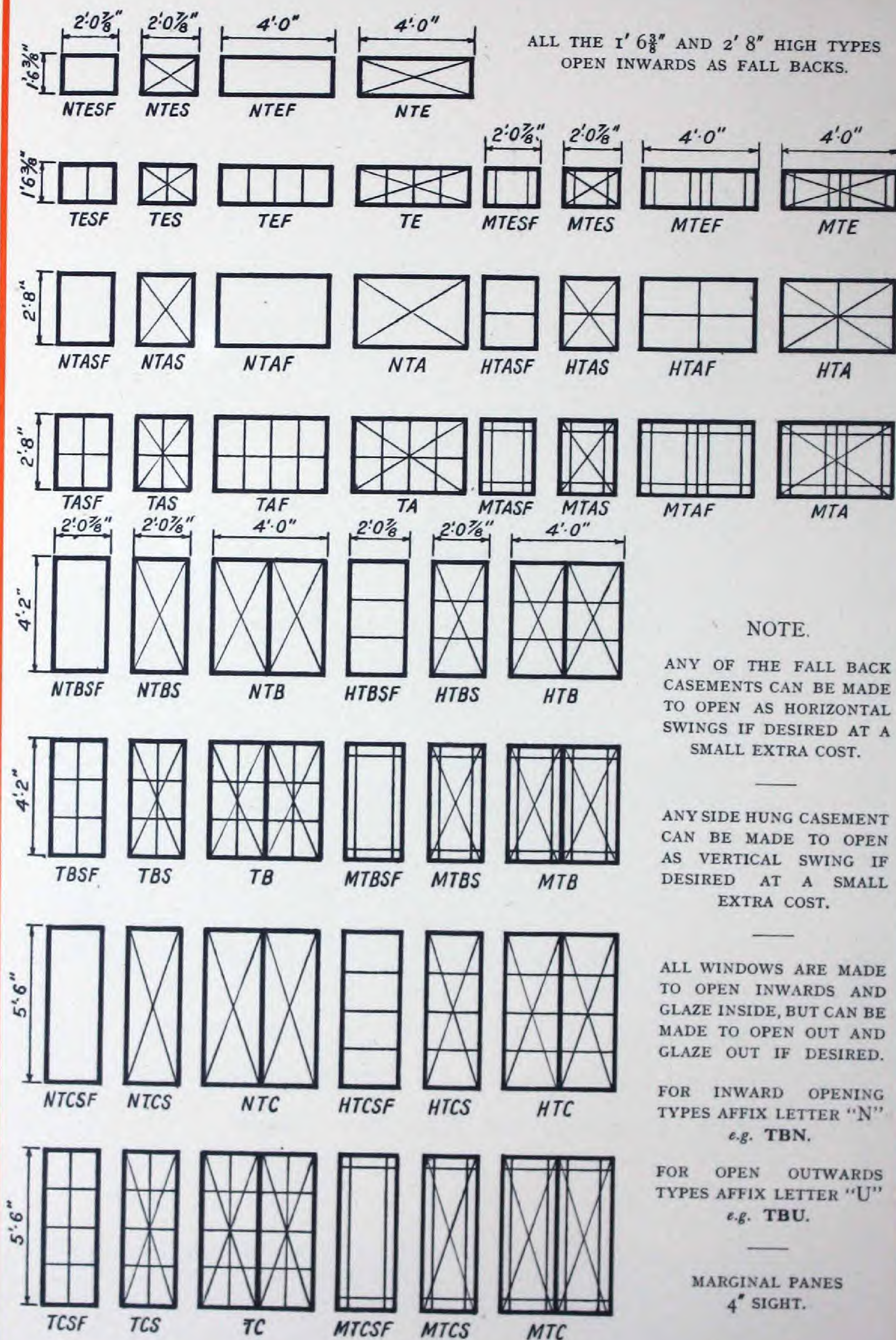
STANDARD
TROPICAL
WINDOWS

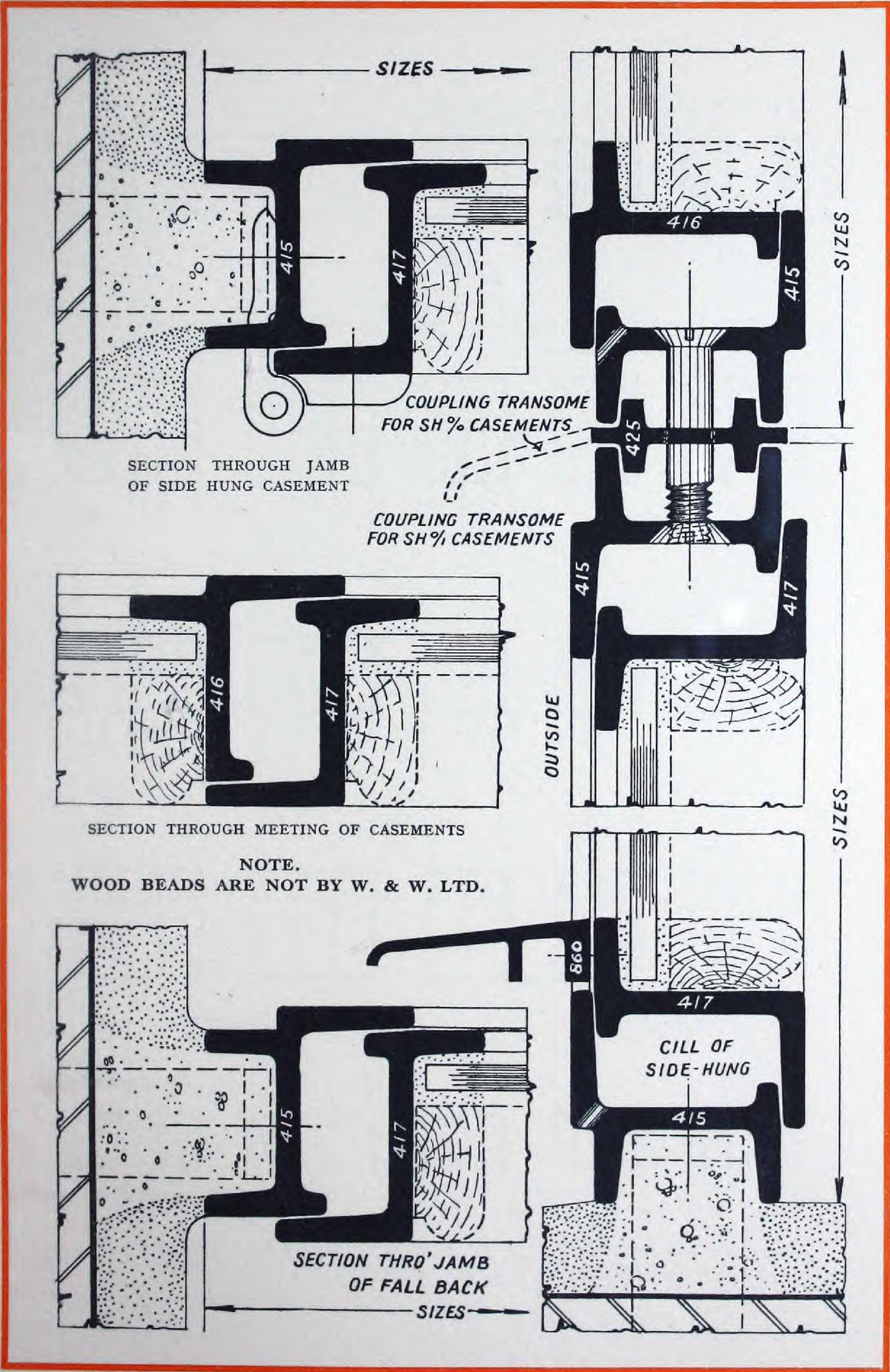
which will meet nearly every requirement of these countries.

By Standardisation we have been able to reduce the cost, whilst retaining all the exclusive features of our purpose made products.

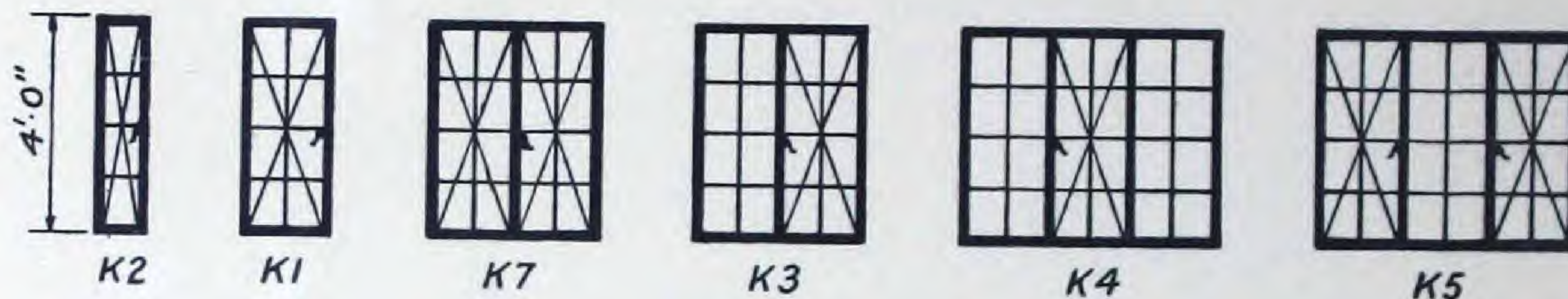
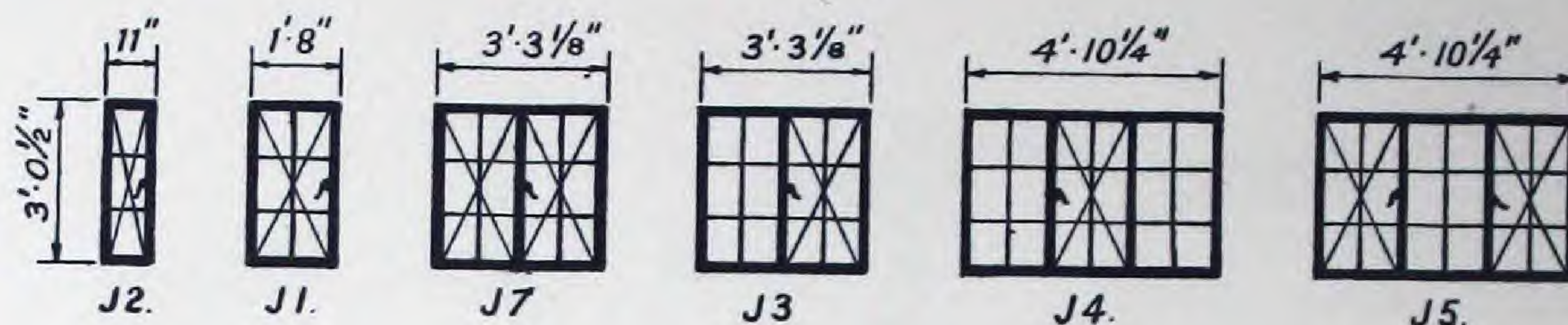
All Standard Tropical Windows and Doors are provided with Steel outer Frames suitable for fixing direct to brick, concrete or masonry walls.

GLAZE INSIDE OPEN INWARDS TYPES & SIZES

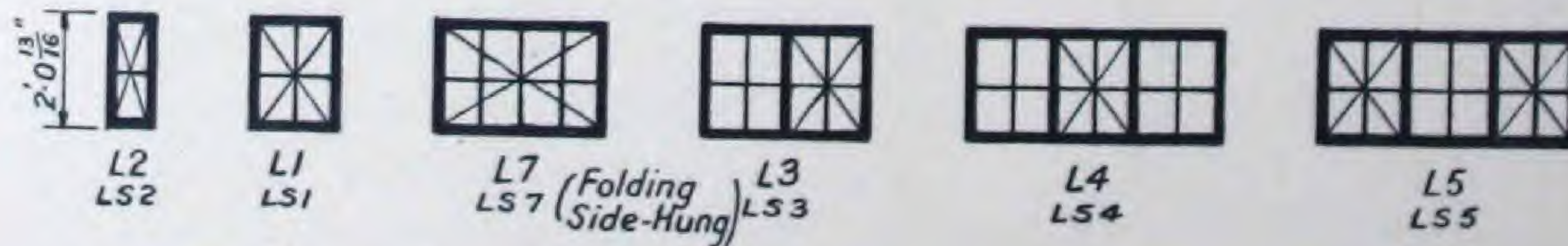




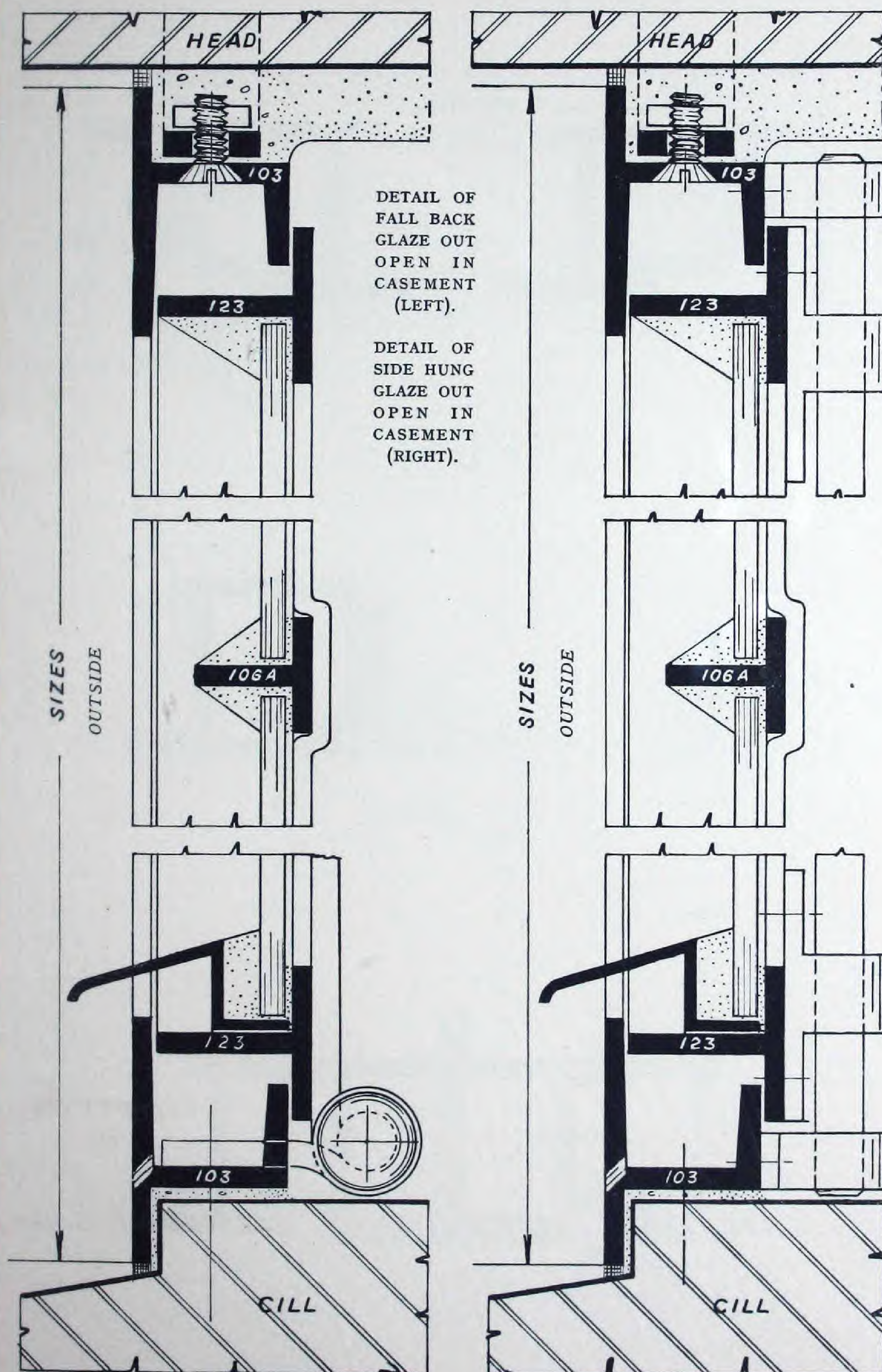
GLAZE OUT OPEN INWARDS TYPES & SIZES



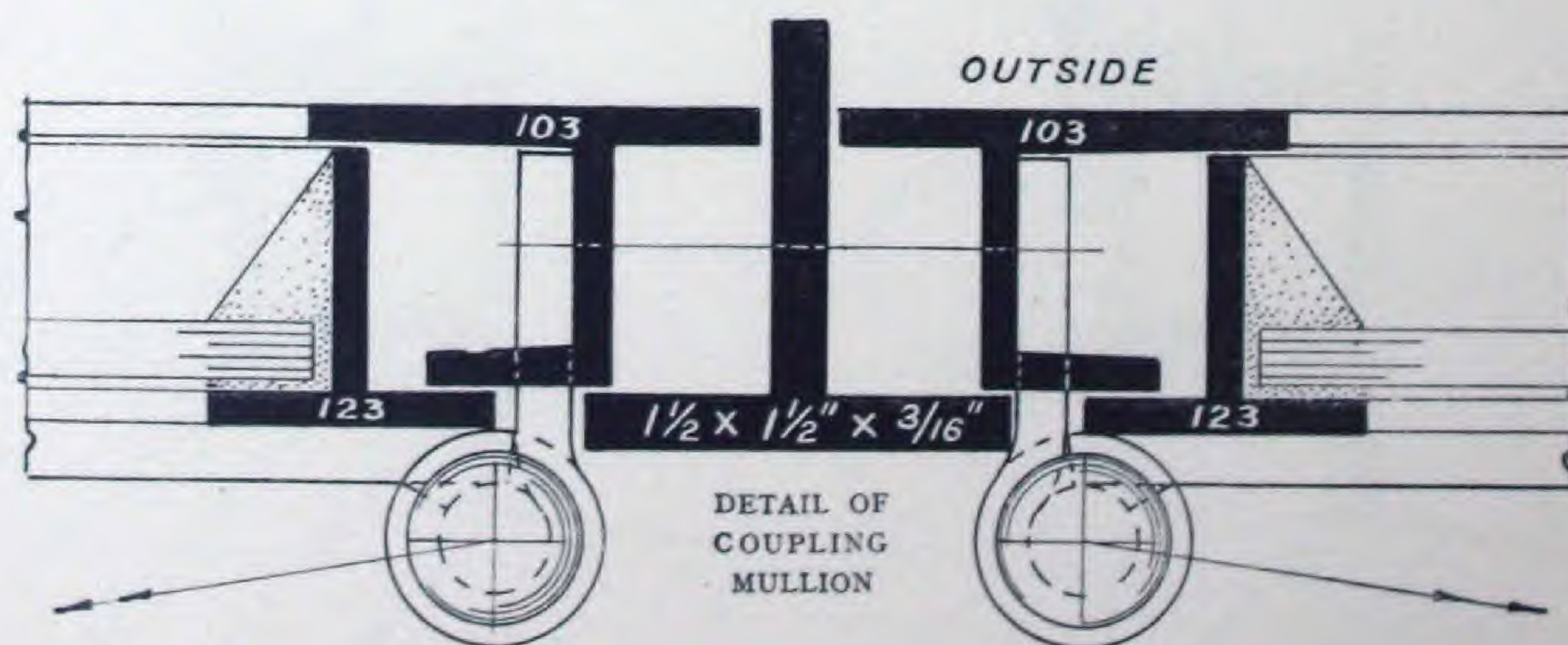
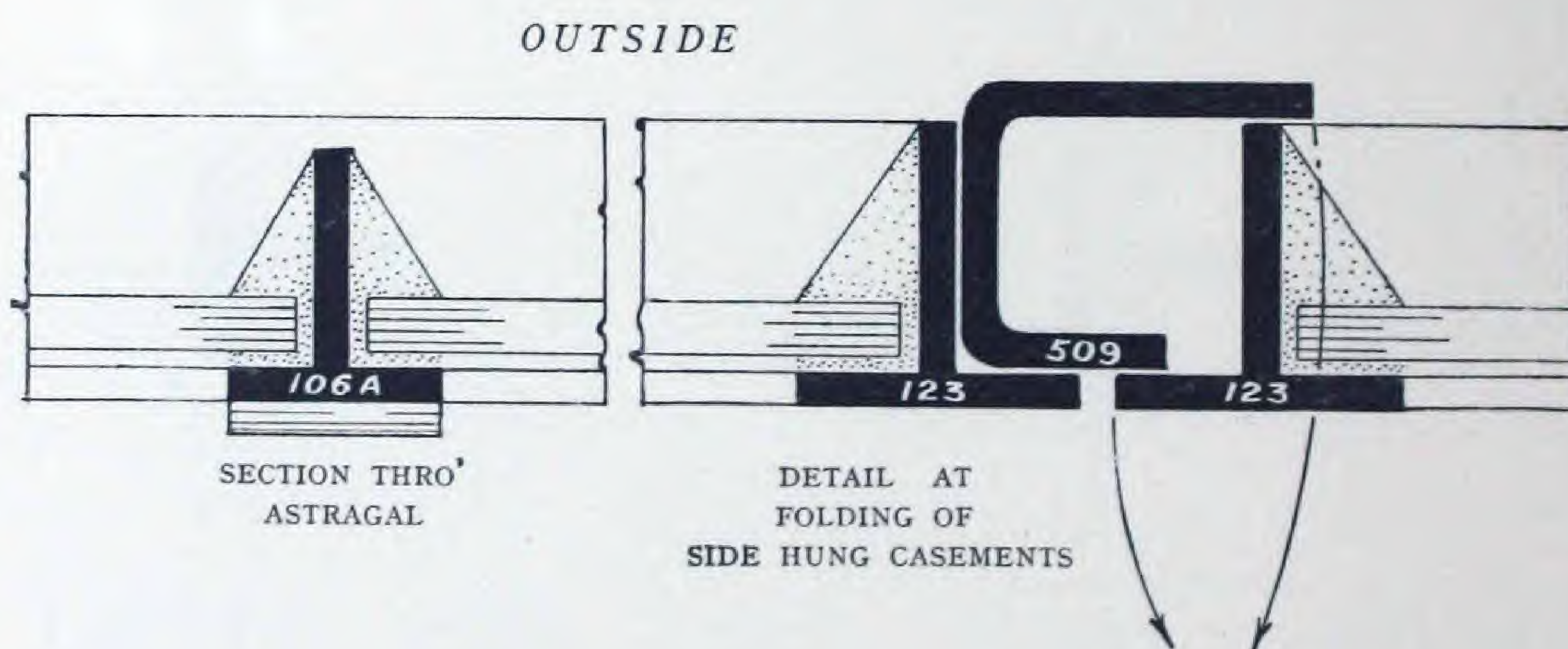
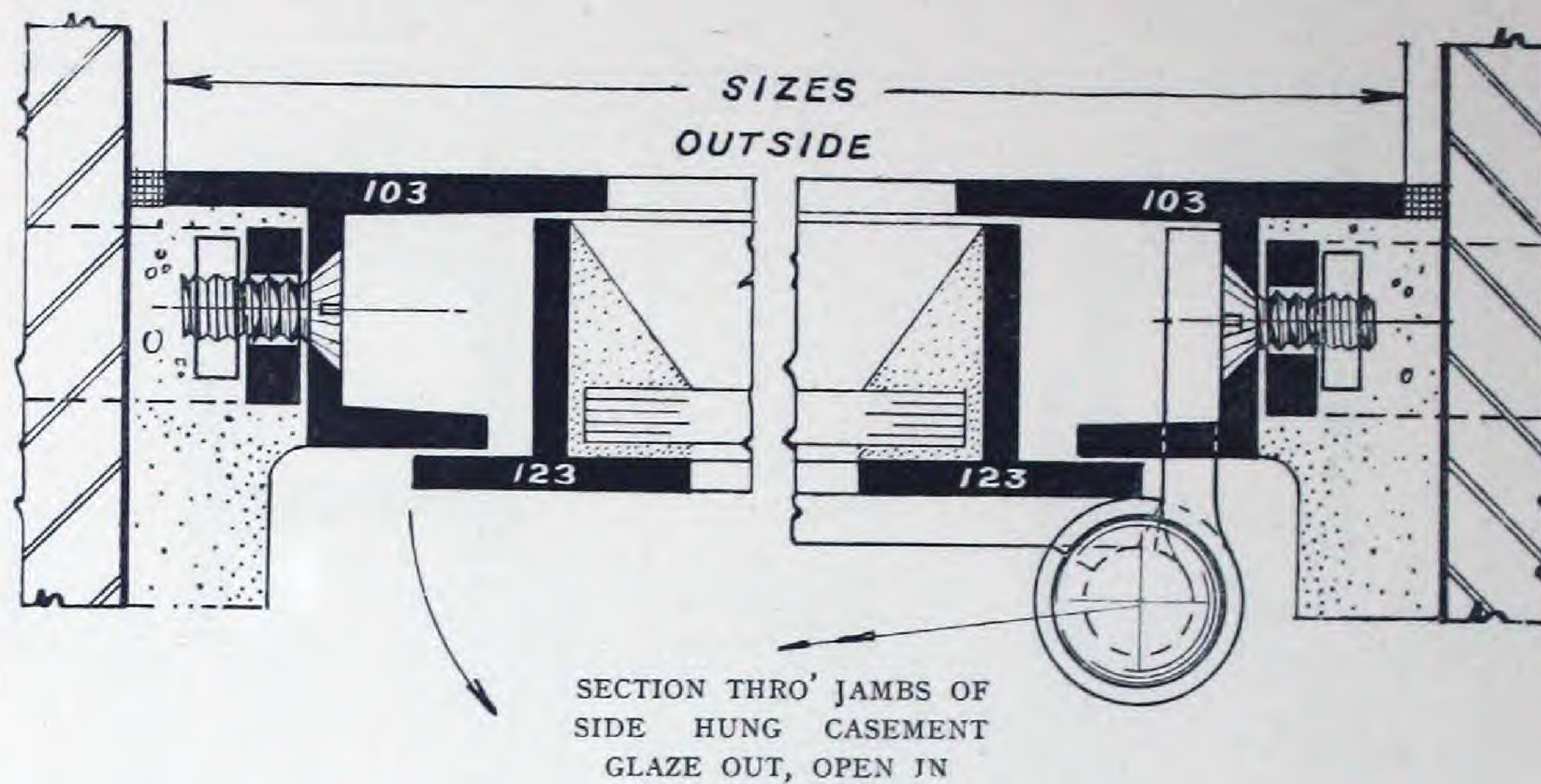
ALL THE ABOVE TYPES ARE MADE TO GLAZE OUT
AND TO OPEN INWARDS AS SIDE HUNG CASEMENTS



L TYPE CASEMENTS ARE MADE BOTTOM HUNG. IF REQUIRED TO OPEN
INWARDS AS SIDE HUNG INCLUDE LETTER "S" AS SHOWN ABOVE



FULL SIZE DETAILS



To meet the requirements of a number of our friends we have produced a range of Tropical Casements to suit the standard glass size of 12" x 10". These are similar in elevation and construction to types J, K and L, shown on page 114.

A full list of these is given below.

STANDARD TROPICAL CASEMENTS

GLAZE OUT, OPEN INWARDS

TYPE S.P.

| Type | Elevation & Opening as Type | Height | Width | Type | Elevation & Opening as Type | Height | Width |
|------|-----------------------------------|-------------------------------|--------------------------------|------|-----------------------------------|---------------------------------|--------------------------------|
| SP1F | L1 | ft. ins. 2 3 $\frac{3}{8}$ | ft. ins. 1 11 $\frac{3}{8}$ | SP5 | J1 | ft. ins. 3 3 $\frac{11}{16}$ | ft. ins. 1 11 $\frac{3}{8}$ |
| SP27 | L7 | 2 3 $\frac{3}{8}$ | 3 9 $\frac{1}{8}$ | SP6 | J7 | 3 3 $\frac{11}{16}$ | 3 9 $\frac{1}{8}$ |
| SP9F | L2 | 2 3 $\frac{3}{8}$ | 1 1 $\frac{1}{16}$ | SP17 | J2 | 3 3 $\frac{11}{16}$ | 1 1 $\frac{1}{16}$ |
| SP3 | LS1 | 2 3 $\frac{3}{8}$ | 1 11 $\frac{3}{8}$ | SP7 | K1 | 4 4 | 1 11 $\frac{3}{8}$ |
| SP4 | LS7 | 2 3 $\frac{3}{8}$ | 3 9 $\frac{1}{8}$ | SP8 | K7 | 4 4 | 3 9 $\frac{1}{8}$ |
| SP13 | LS2 | 2 3 $\frac{3}{8}$ | 1 1 $\frac{1}{16}$ | SP21 | K2 | 4 4 | 1 1 $\frac{1}{16}$ |

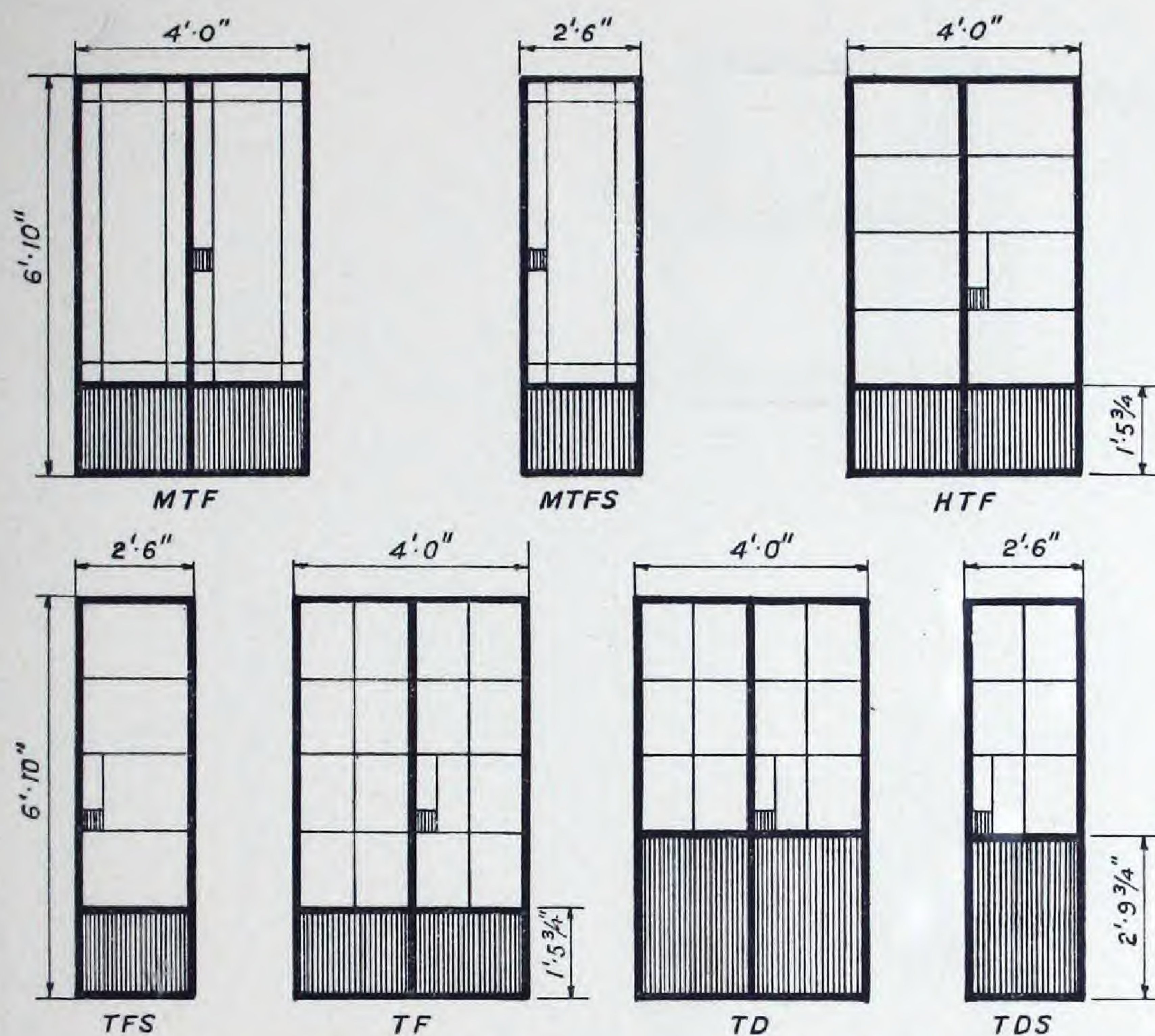
The
STANDARD
TROPICAL
FRENCH DOORS

shown on the following pages are similar in manufacture to our standard French Doors, but are made to glaze inside with hard wood Beads and to open outward.

They can also be made to glaze outside and open inward if required.

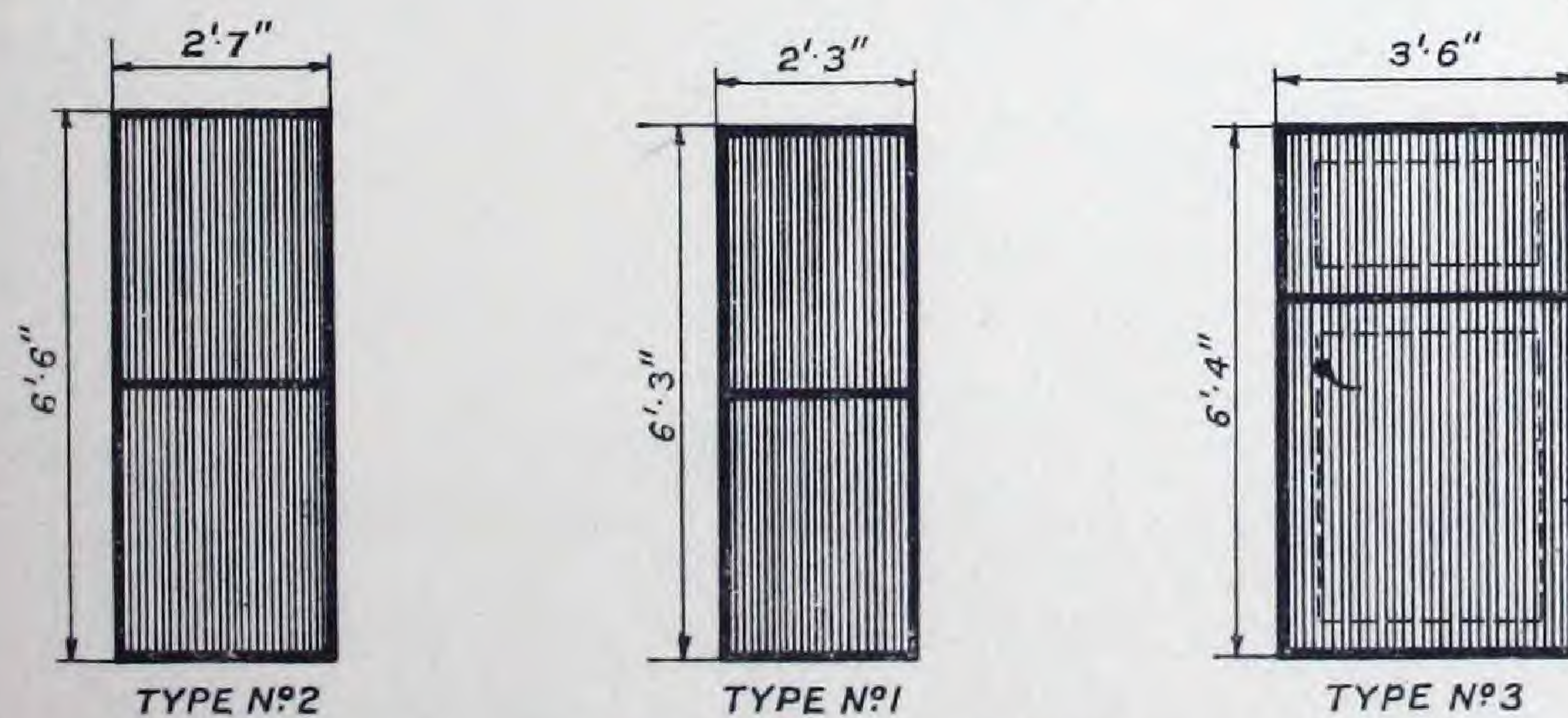
In Tropical Countries Doors are usually provided with fly screens and shutters, details of which are shown on page 122.

Details of all Steel Doors for Chawls, Store Rooms, Coolies quarters, etc., are shown on page 121, with overall sizes and types on page 119. These are inexpensive Doors which will withstand rough usage and yet remain proof against fire and white ant.



FOR SPECIFICATION OF THE ABOVE TYPES SEE PAGE I26

FULL SIZE DETAILS ON PAGE I20

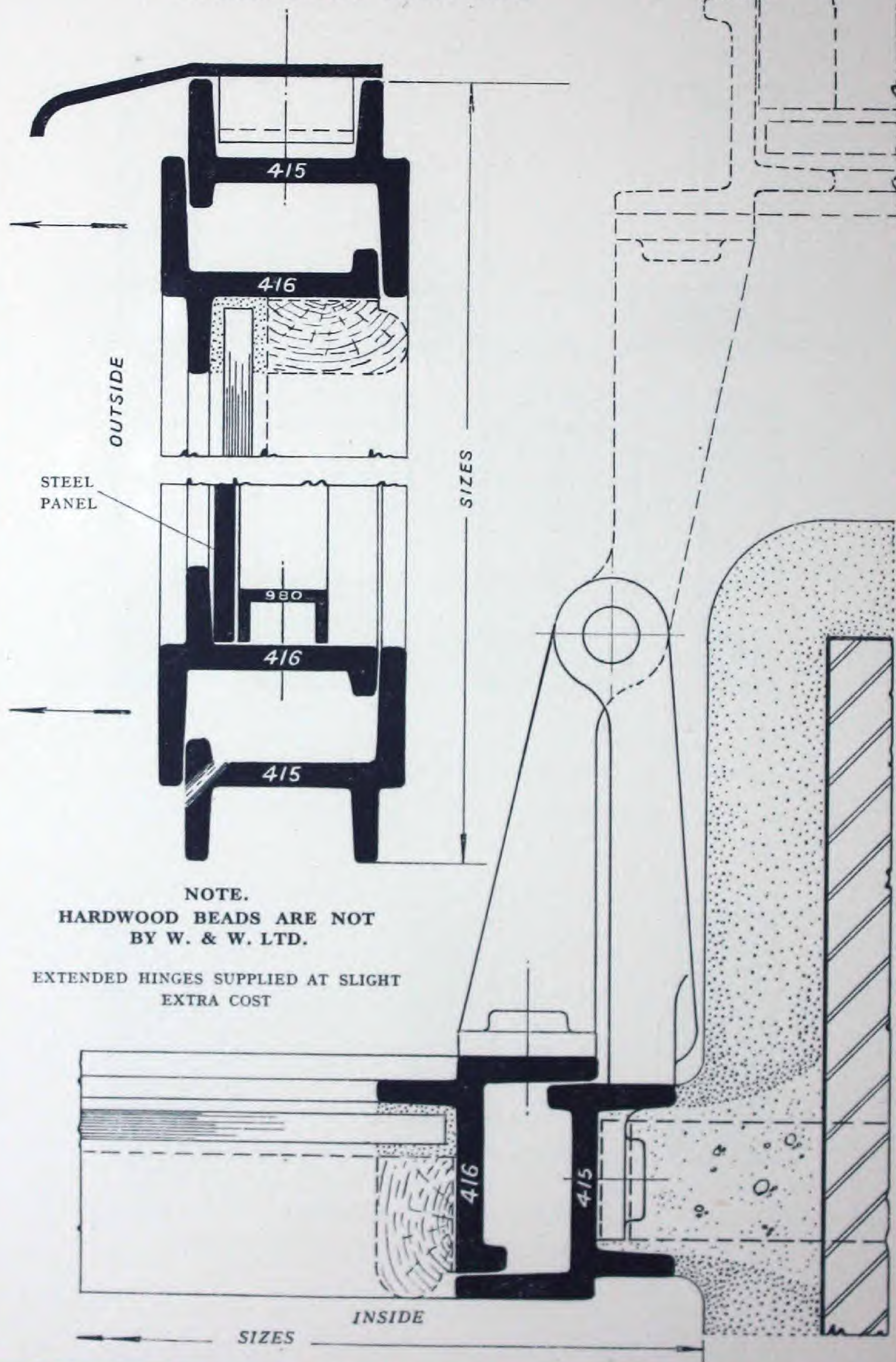


ALL-STEEL DOORS

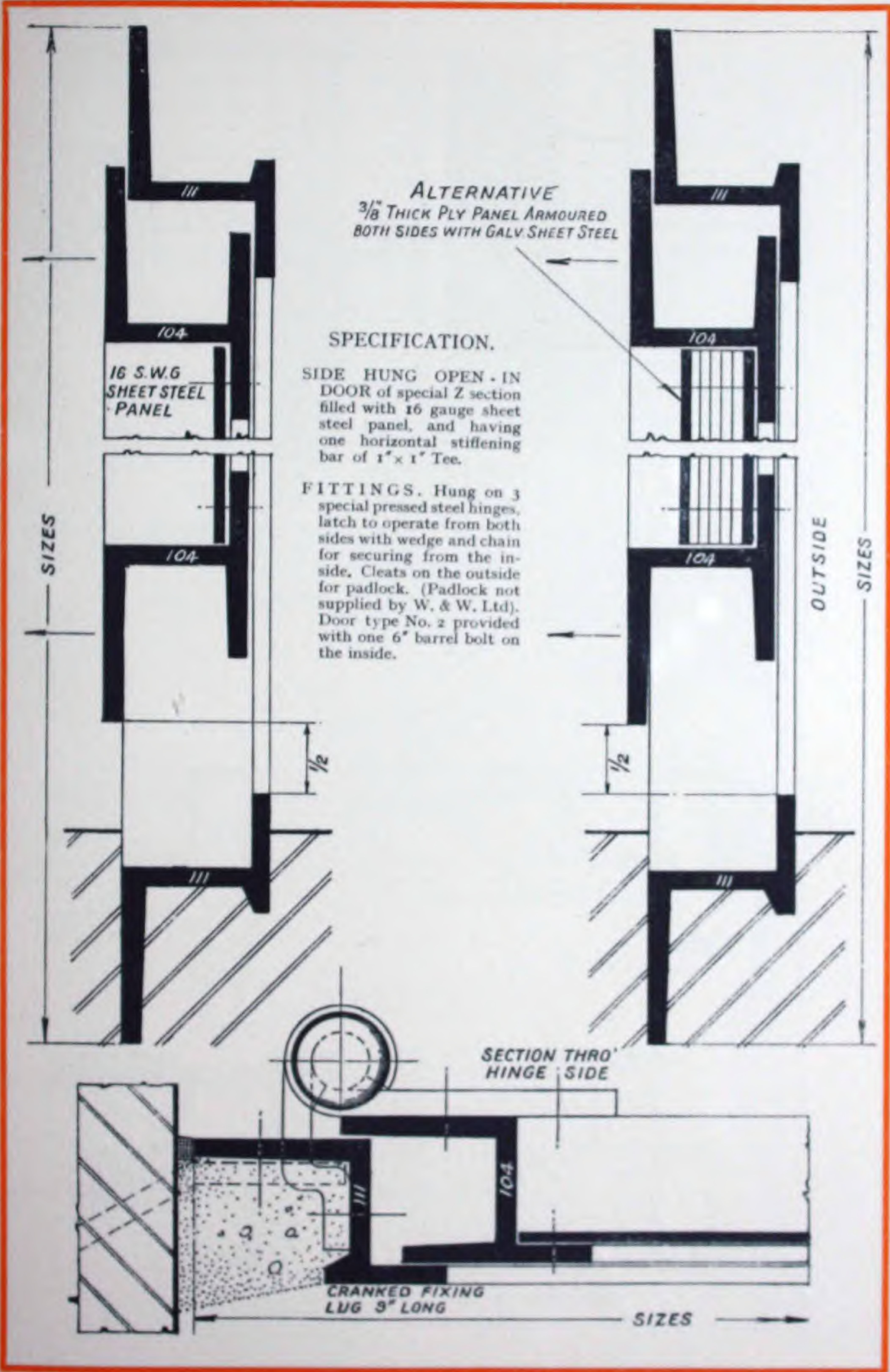
FOR SPECIFICATION AND FULL SIZE DETAILS SEE PAGE I2I

FULL SIZE DETAILS

DETAIL AT HEAD, JAMB AND CILL OF
STANDARD TROPICAL FRENCH DOORS

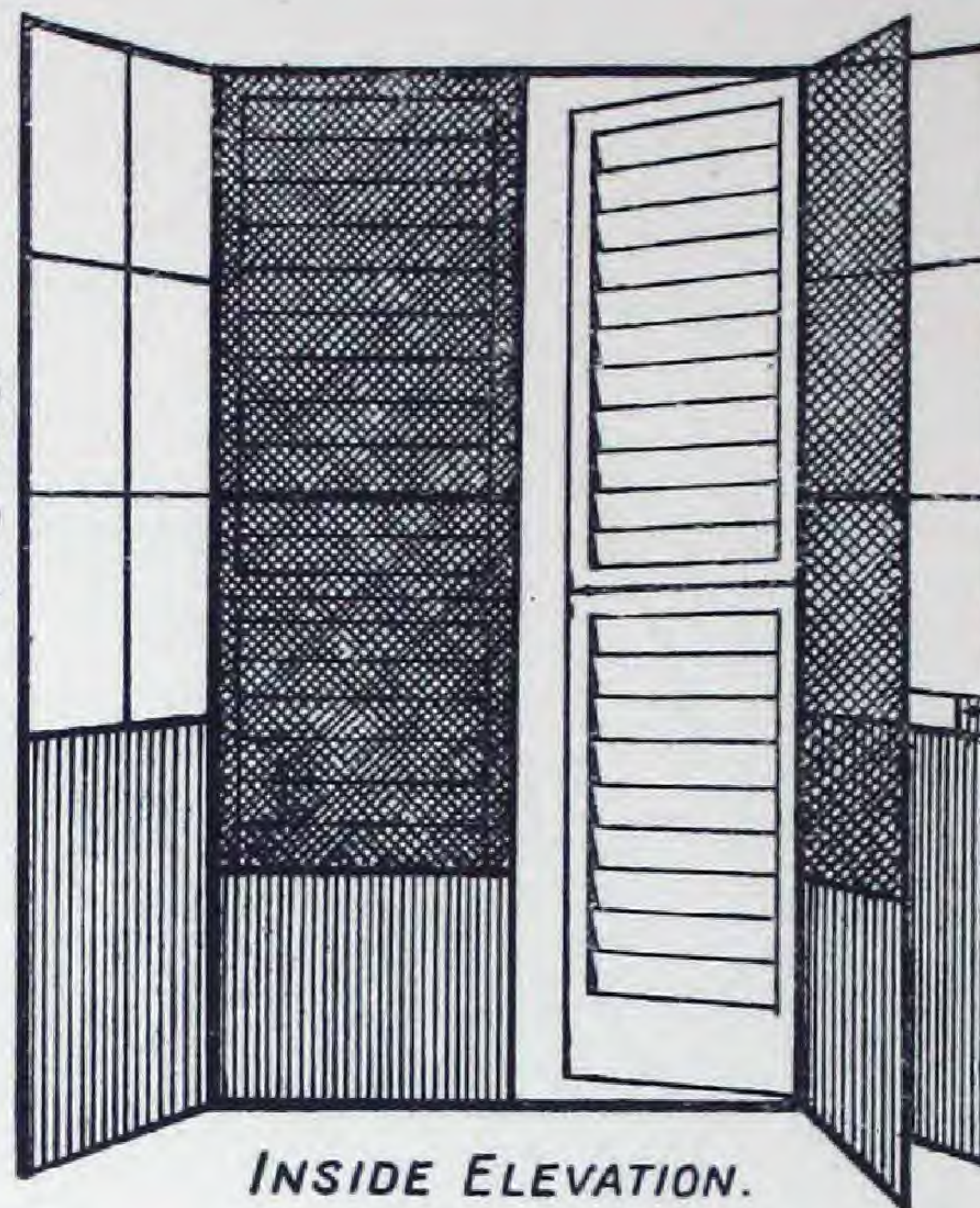


FULL SIZE
DETAILS



FLY SCREENS AND SHUTTERS

STANDARD TYPE
T.D.N. DOOR WITH
FLY-SCREEN AND
WOOD SHUTTERS.

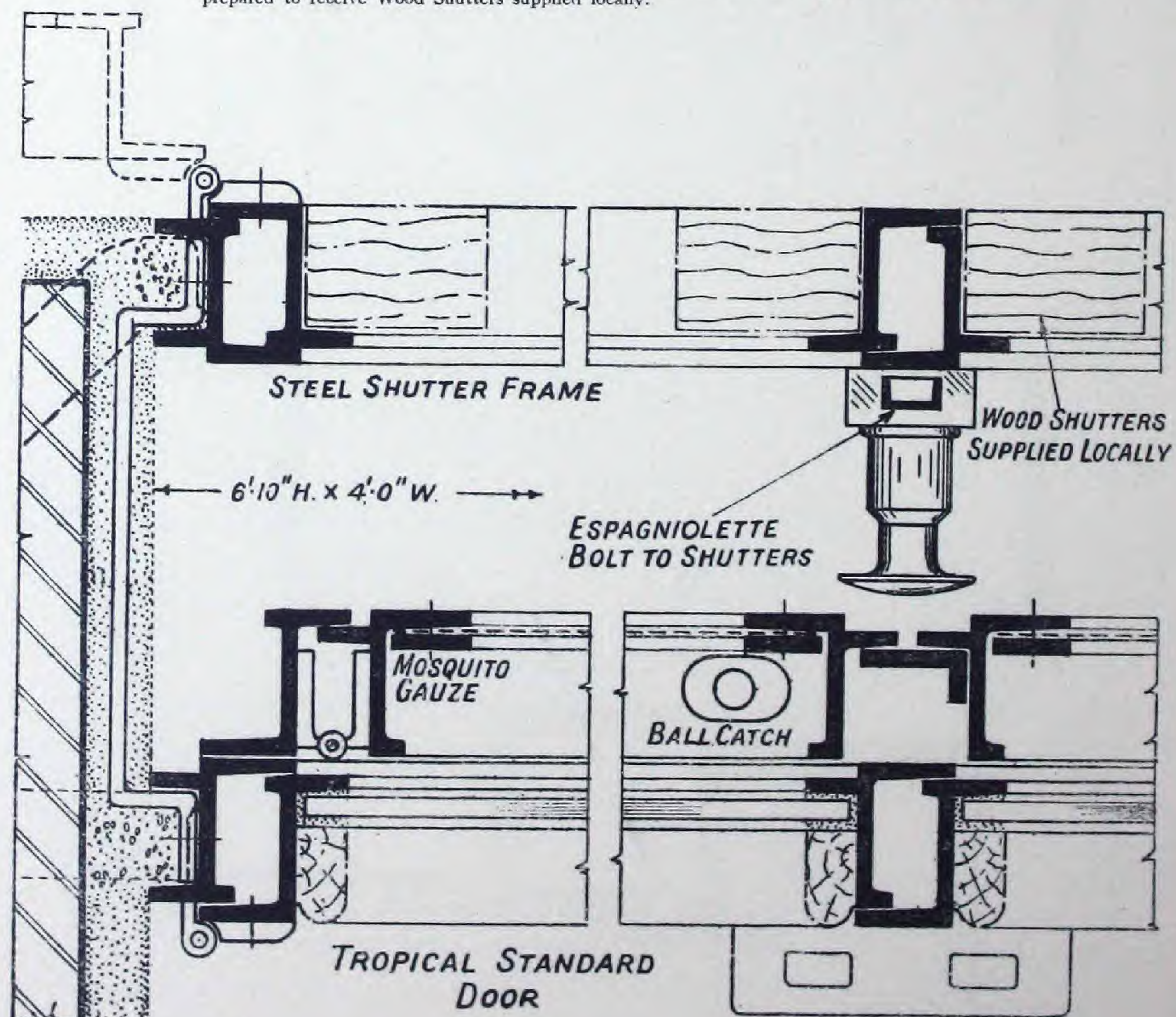


INSIDE ELEVATION.

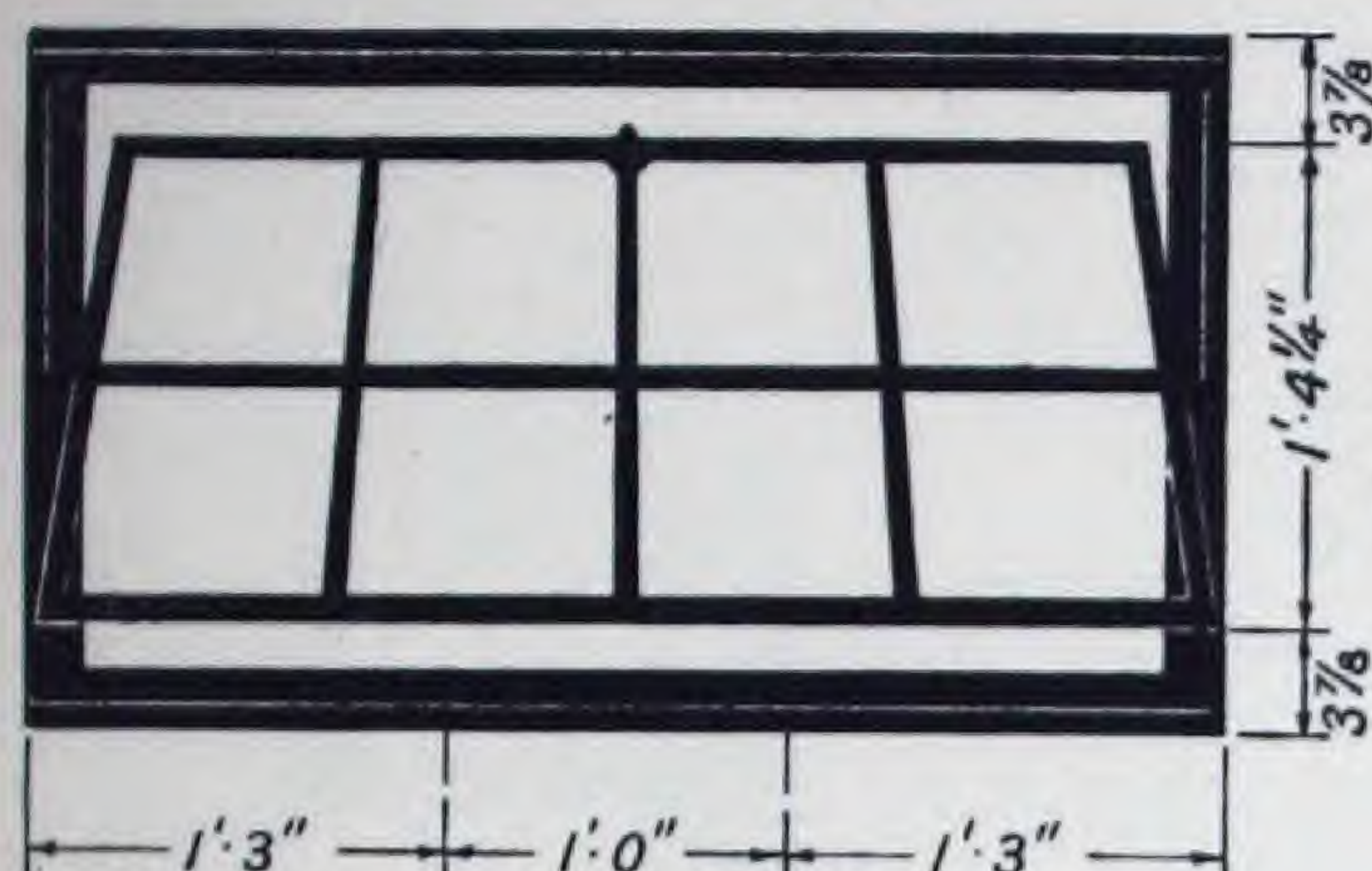
SPECIFICATION.

STANDARD TYPE T.D.N. DOOR, having a frame permanently fixed on the outside face of door. Supplementary hinged frames are attached to this and open in through the door. These hinged frames have a lower panel of 16 gauge sheet steel, and upper portion filled with 16 mesh galvanized wire gauze (copper gauze can be supplied at a slightly increased charge) having one horizontal stiffener of 1" x 1 1/4" Tee.

THE SHUTTER FRAMES (attached to the door by means of steel straps) open out and fold back against outer face of wall, and have one horizontal stiffener of 1" x 1 1/4" Tee. The frames are prepared to receive Wood Shutters supplied locally.



CLERESTORY WINDOWS



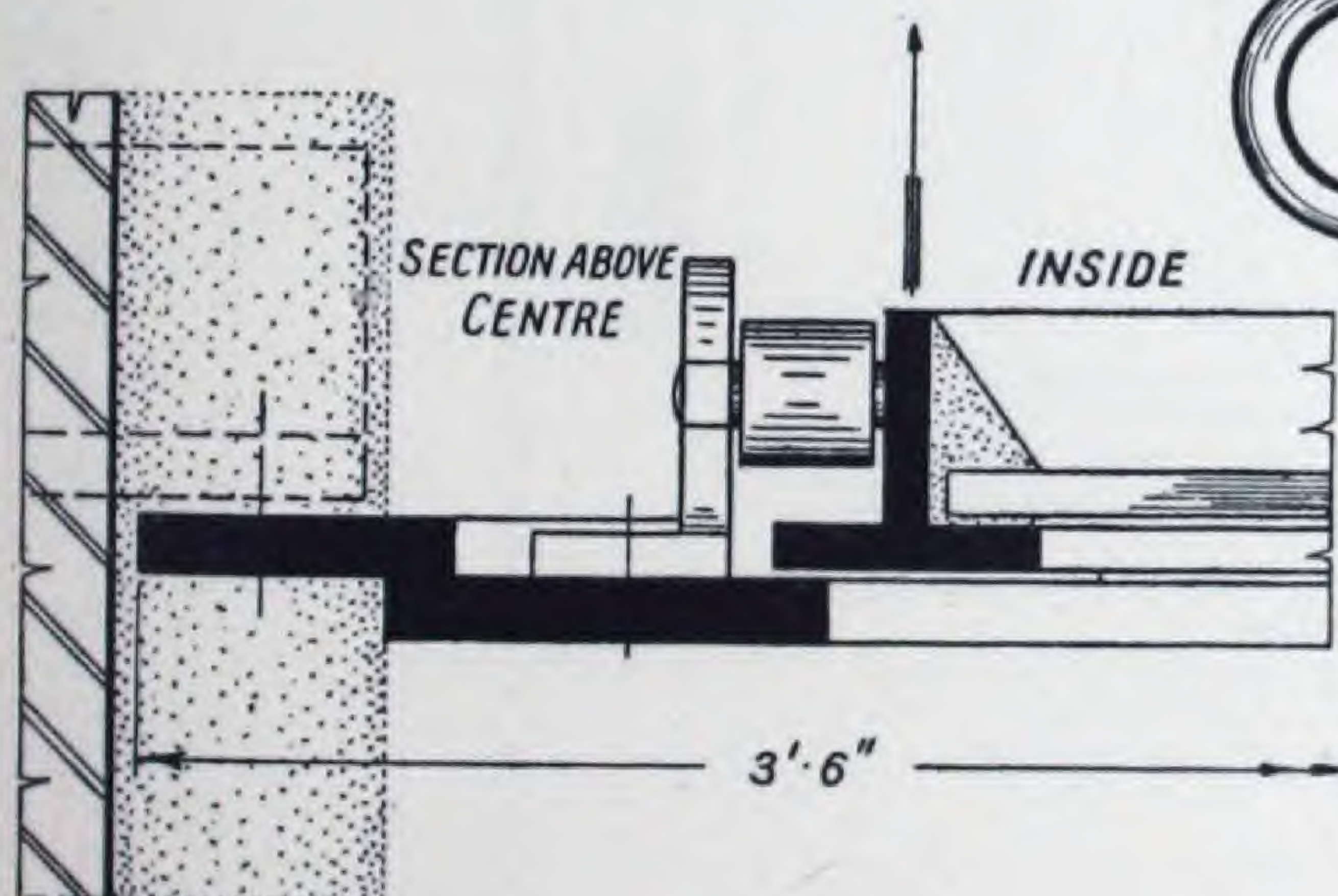
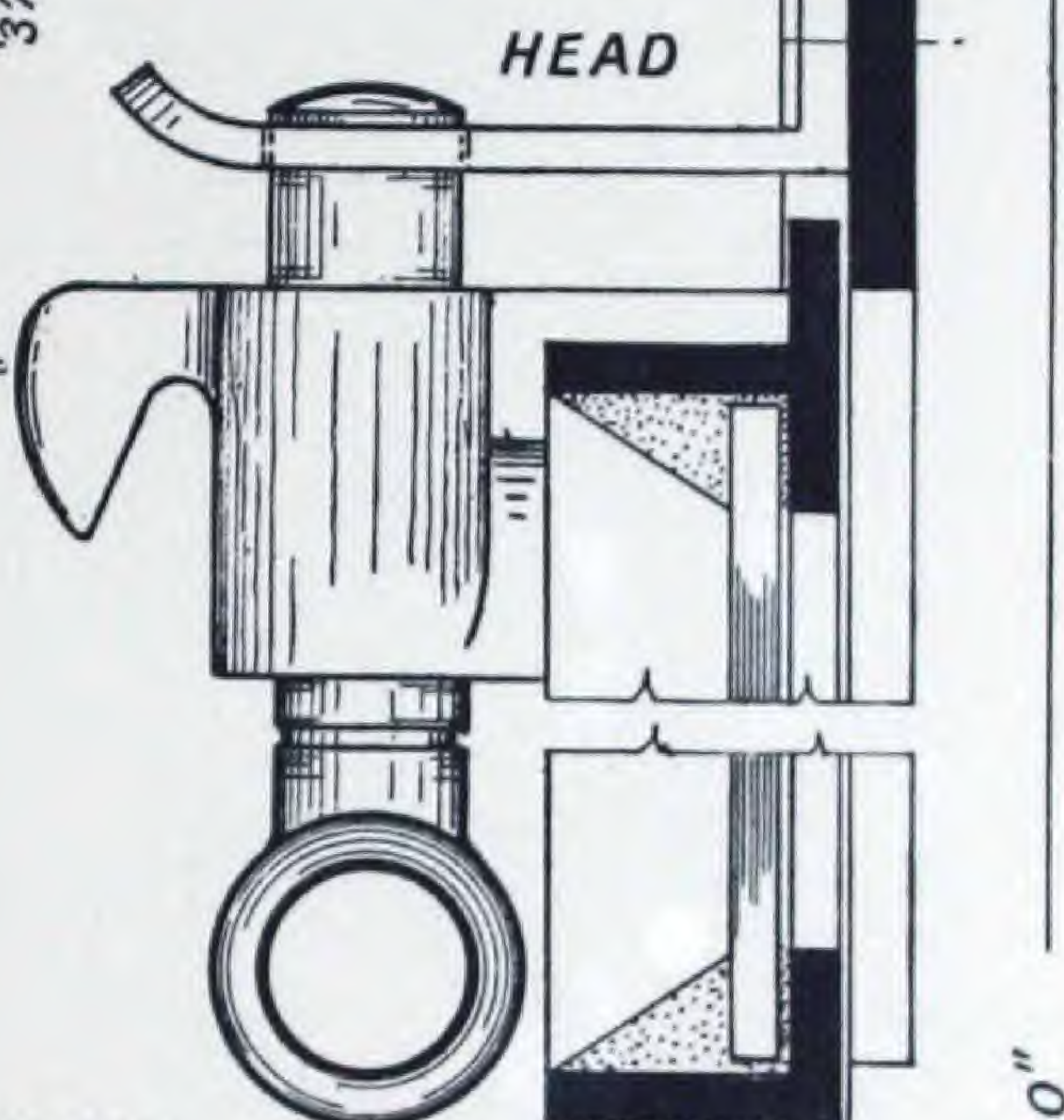
OUTSIDE ELEVATION

SPECIFICATION.

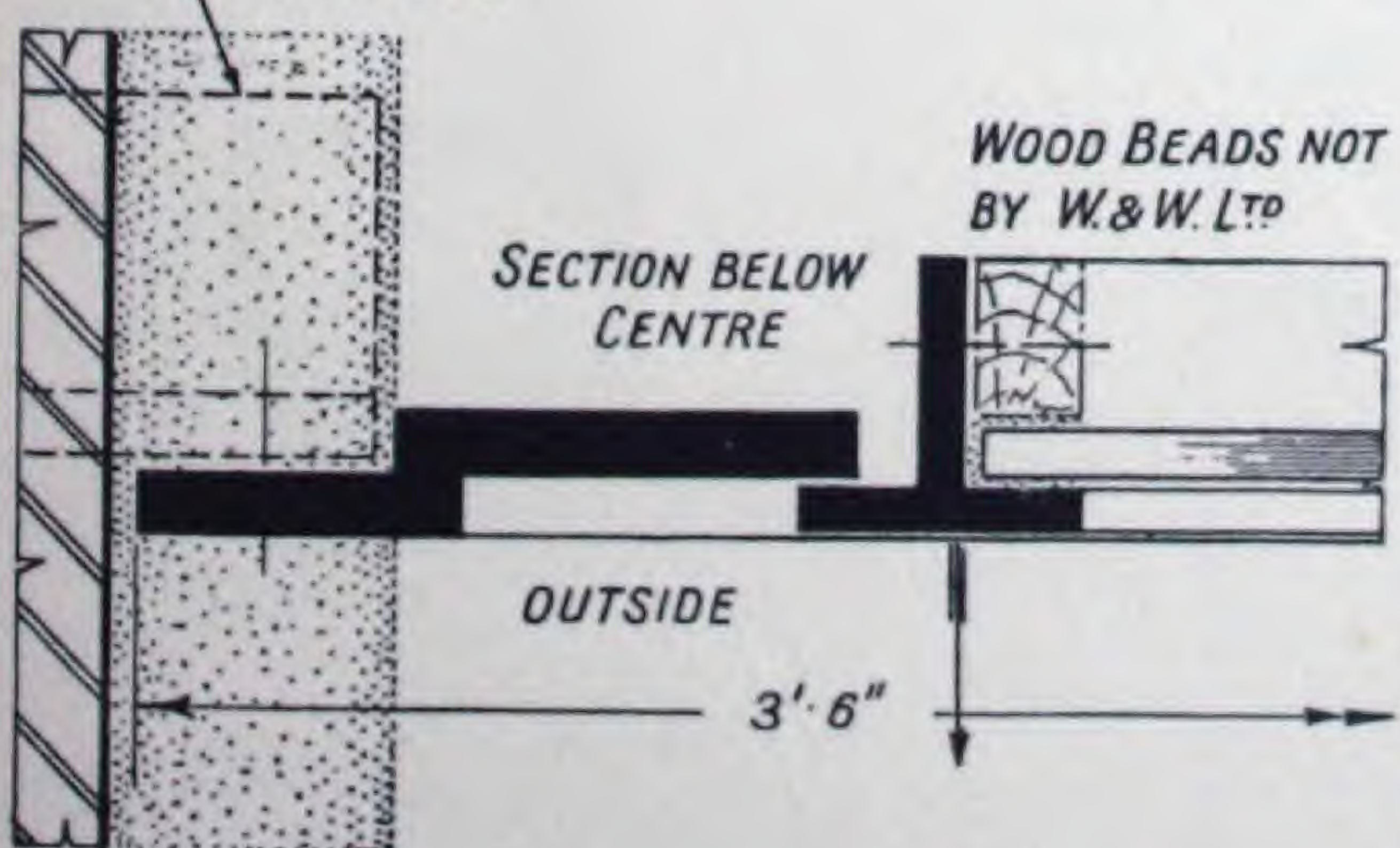
HORIZONTALLY CENTRE HUNG CASEMENT of $\frac{1}{2}$ " x $\frac{1}{2}$ " Tee section, divided into panes by $\frac{1}{2}$ " equal Tee astragals.

Prepared for Glazing from the inside with wood beads. (Beads not supplied by W. & W. Ltd).

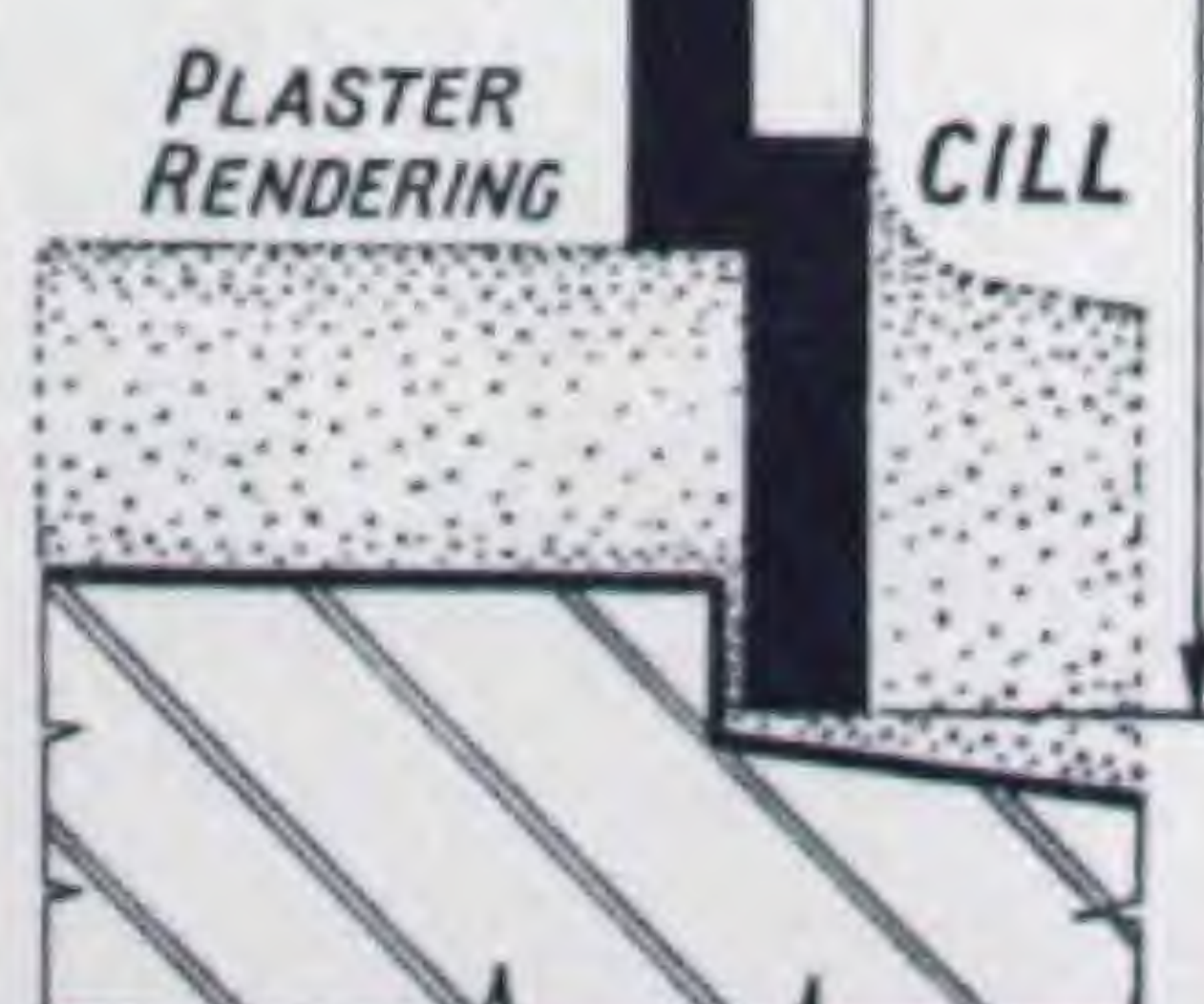
ACTUAL GLASS
SIZES 8 PIECES
 $9\frac{5}{8}$ " H. x $9\frac{3}{16}$ " W.



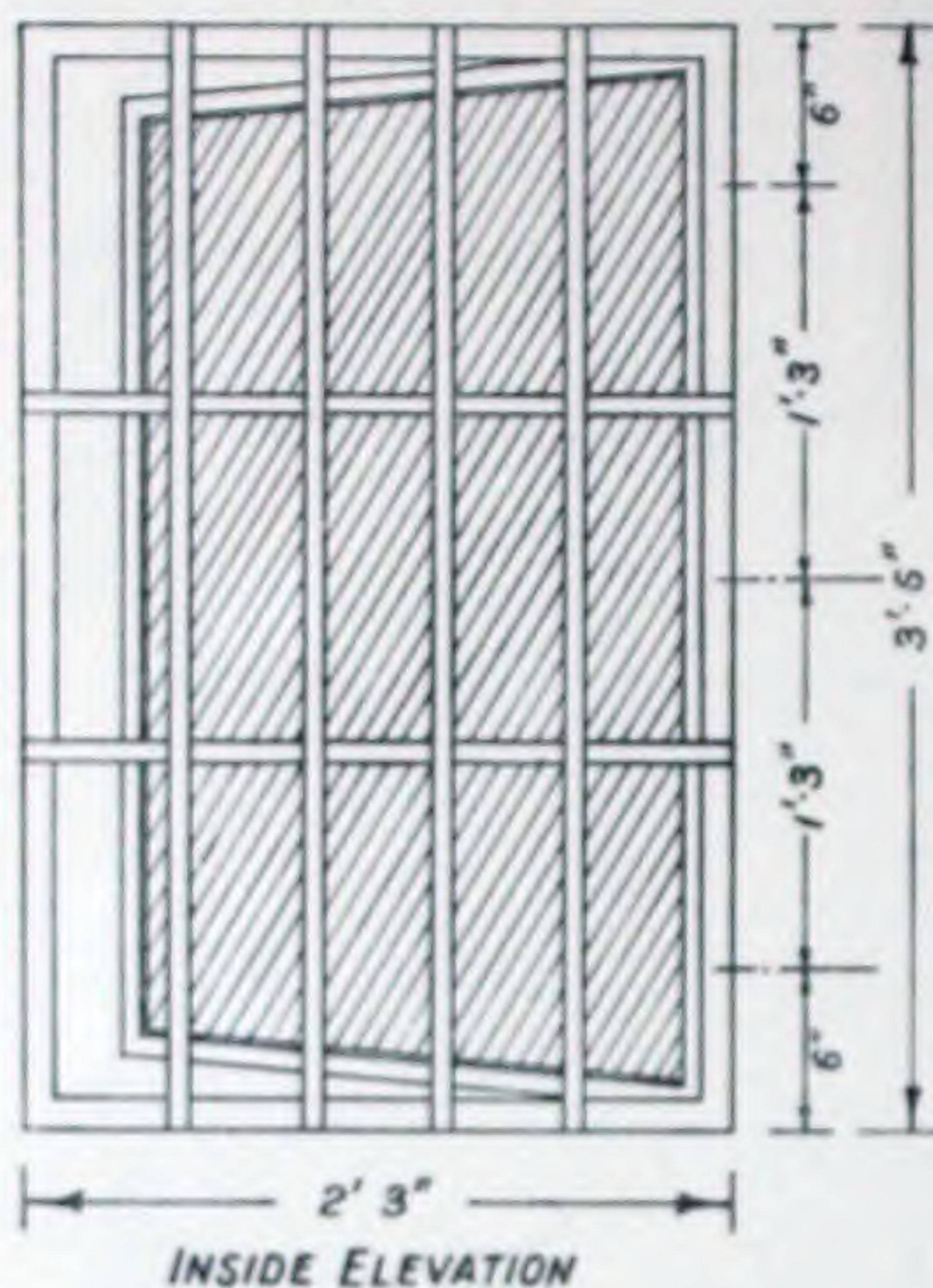
TEE FIXING LUGS 9" LONG



WOOD BEADS NOT
BY W. & W. LTD



ALL STEEL WINDOW WITH GUARD BARS



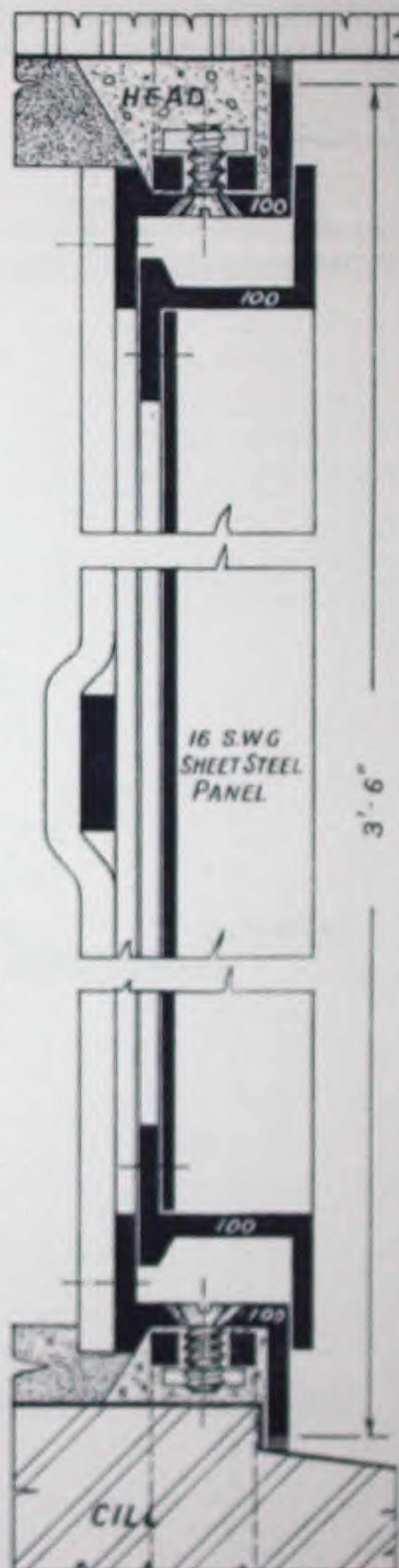
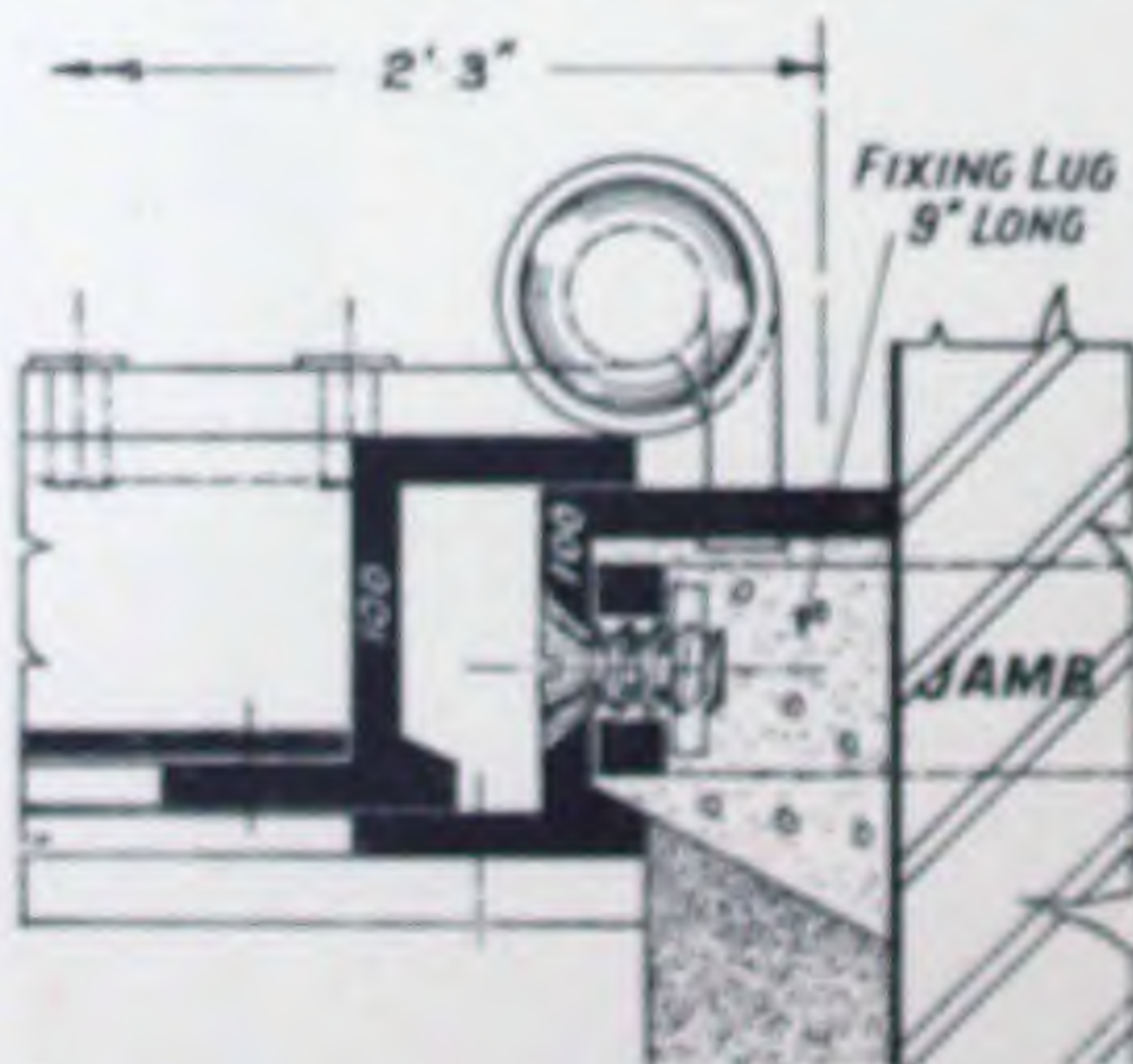
SPECIFICATION.

CASEMENT. Side-hung, open-out constructed of special Z section filled with 16 gauge sheet steel.

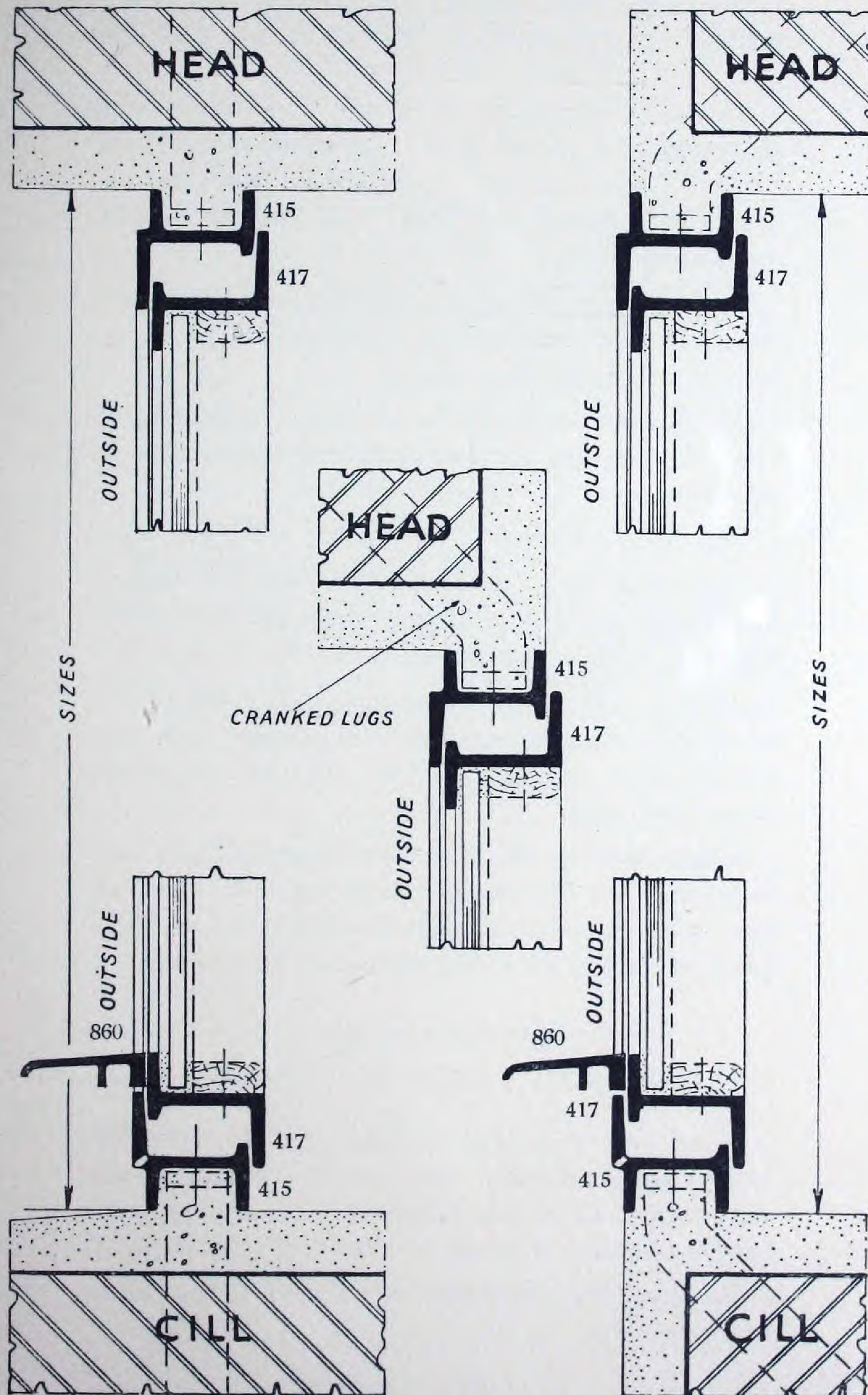
Vertical Guard Bars on inside of 1" flats rivetted to outer frame interlocked with two horizontal bars of 1" flat steel.

Caseiment hung on pressed steel hinges and fitted with iron bolt operating from the inside.

Extended hinges to allow the windows to fold back against the face of wall can be provided without extra charge if required, but they must be specified.



TYPICAL FIXING DETAILS



SPECIFICATION

GENERAL SPECIFICATION FOR RELIANCE TROPICAL WINDOWS & DOORS IN 400 SERIES

Standard Reliance Tropical Casements are constructed of Rolled Mild Steel Sections of first quality. All Bars are hydraulically straightened, scaled and cleaned, free from rust, hammer marks and rolling flaws.

Cross joints of glazing bars are locked to strengthen the points of intersection. Corners are machine mitred and electrically welded.

All Bottom hung ("N") are fitted with Spring Catch for opening by long arm, and with concealed side arms.

Top hung Casements ("U") fitted with peg stay.

Single Side hung Casements ("U") and ("N") fitted with handle and pair of hinges. Open out types fitted with stay, open in types fitted with cabin hook eye.*

Folding side hung Casements ("U") and ("N") fitted with espagnolette bolt and hinges, open out ("U") have a stay on each leaf, open in ("N") have cabin hook eyes.*

Single and Double Doors fitted with hinges and lock with lever handles on last closing leaf. One leaf fitted with 2 barrel bolts. If bolts are required on both leaves of the Double Doors they must be specified.

SPECIFICATION FOR GLAZE OUT, OPEN IN TYPES (Page 114)

These are fitted with pressed steel hinges with bronze pins, malleable iron handle to single side hung casements, espagnolette bolts to folding side hung casements, also cabin hook eye.*

Bottom hung Casements fitted with spring catch and side arms.

*Cabin hooks sent loose.

*DETAILS REQUIRED WHEN ORDERING AND
ENQUIRING FOR ALL TYPES OF RELIANCE
STANDARD STEEL WINDOWS.*

Please state:—

1. Type letter and number.
2. Quantity of each type required.
3. Type of Ventilator required, stating which hand.
(The hand of a Casement is the side on which the hinges are fixed looking from the inside, i.e., a right hand side hung casement has the hinges on the right hand side.)
4. Whether projecting (easy cleaning) hinges are required to sidehung casements. Addition of the letter "X" to the type letters denotes this.
5. Whether glazing Bars, lead glazing or large panes are required. See note on page 10.
6. Type of Fittings. Iron or Bronze.
7. In the case of Standard Cottage whether ordinary (100/100) or wide Frame (111/100) section is required.
8. In the case of Standard Tropical Casements TA, TB, TC, TD, TE types, state whether inside or outside glazing and opening is required. Glaze in, open in, is standard.
9. Whether Wood Surrounds are required and size (out of 3 1/2-in. x 2 1/2-in. or 4-in. x 3-in.).
10. When Windows in Wood Surrounds are required, whether Mullions and Transomes are to be steel or wood.
11. When Bays in Wood Surrounds are required, whether Wood or all Steel Corner Posts, Mullions and Transomes are required.
12. To whom the goods are to be invoiced.

Also please:—

1. Give full despatch instructions, name of consignee, address where delivery is to be made, and date delivery is required.
2. Indicate the materials from which the openings are formed so that appropriate fixing lugs or screws may be sent.
3. Order the Windows as soon as the General Contract is signed.

*GENERAL INSTRUCTIONS FOR FIXING ALL
TYPES OF RELIANCE METAL WINDOWS.*

Typical Fixing details are given in each section of this Catalogue, but attention to the following points in conjunction with the appropriate details will ensure the Windows being properly fixed.

1. The fixing of Metal Windows should be left until all the rougher trades have left the site, and the openings are ready for glazing. Where this is not feasible, care must be taken to see that the Windows are not damaged by placing scaffold boards on the Cills, or drawing heavy objects through them. It is also advisable to detach and store all fittings until the building is finished.
2. Do not attempt to force a window into an opening which is too small to receive it, if necessary cut away the surrounding work until the Metal Window goes easily into position.
3. In stone, brick, artificial stone or concrete openings mark off the position of the fixing holes, and having cut the holes insert elm plugs, or steel lugs.
4. Fill the channel of the frame with mastic before inserting in the opening.
5. Screw Metal Window to the plugs (or wooden frame). Great care must be taken not to distort it by driving the screws in too tightly. Trim off the mastic and point firmly the outside and inside joints.

For pointing Metal Windows the following Specification of Mastic Cement is recommended.

1 part of Red Lead. 4 parts of Ground Lime.
5 parts of Sharp Sand and Brick Dust.

Sufficient boiled Linseed Oil to make the mixture workable.

*INSTRUCTIONS FOR GLAZING AND POINTING
RELIANCE STANDARD STEEL WINDOWS*

The correct glazing of Metal Windows is of as much importance as correct fixing. To ensure this:—

1. See that the Window is correctly fixed and opens and closes perfectly.
2. Cut the Glass at least $1/8$ " smaller in height and width than the tight rebate size of the Casement.
3. Bed the Glass in putty in the usual way, keeping the front putty as narrow as possible, to obtain a neat and workmanlike finish.
4. Insert the putty knife between the edge of the Glass and the frame at the bottom of the Casement on the hinge side, leaving the Glass slightly out of square. Insert small hardwood or lead wedge.

This applies to large paned Windows only.

5. Open the Casement carefully and wedge up the moving frame at the bottom corner of the handle side. This will permit a second small wedge to be inserted between the Glass and the frame at the top of the handle side. Both wedges should be just sufficiently large to ensure a tight fit and should be left permanently in position.

This applies to large paned Casements only.

6. Glazing should now be completed by fixing the glass with pins or clips and finishing off the front putty. Where possible the putty should be left 14 days before painting.
7. The putty should be best linseed oil putty to which has been added, immediately before use, a small proportion of red lead and sufficient gold size (about $\frac{1}{2}$ pint to each 28 lbs.) to give as stiff a compound as may just comfortably be worked.

VERY IMPORTANT

Metal windows should never be employed as structural members, and no weight must be put on them unless they are definitely designed to take it. Ample clearance should be allowed at the head, thus avoiding any undue load being applied through settlement.

